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**Lisk**

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(54) **SELF-CONTAINED SWIMMING POOL**

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***E04H 4/00*** (2006.01)
*E04H 4/14* (2006.01)

(52) **U.S. Cl.**
CPC ..... ***E04H 4/0018*** (2013.01); *E04H 4/144* (2013.01)

(58) **Field of Classification Search**
CPC ..... E04H 4/0018
See application file for complete search history.

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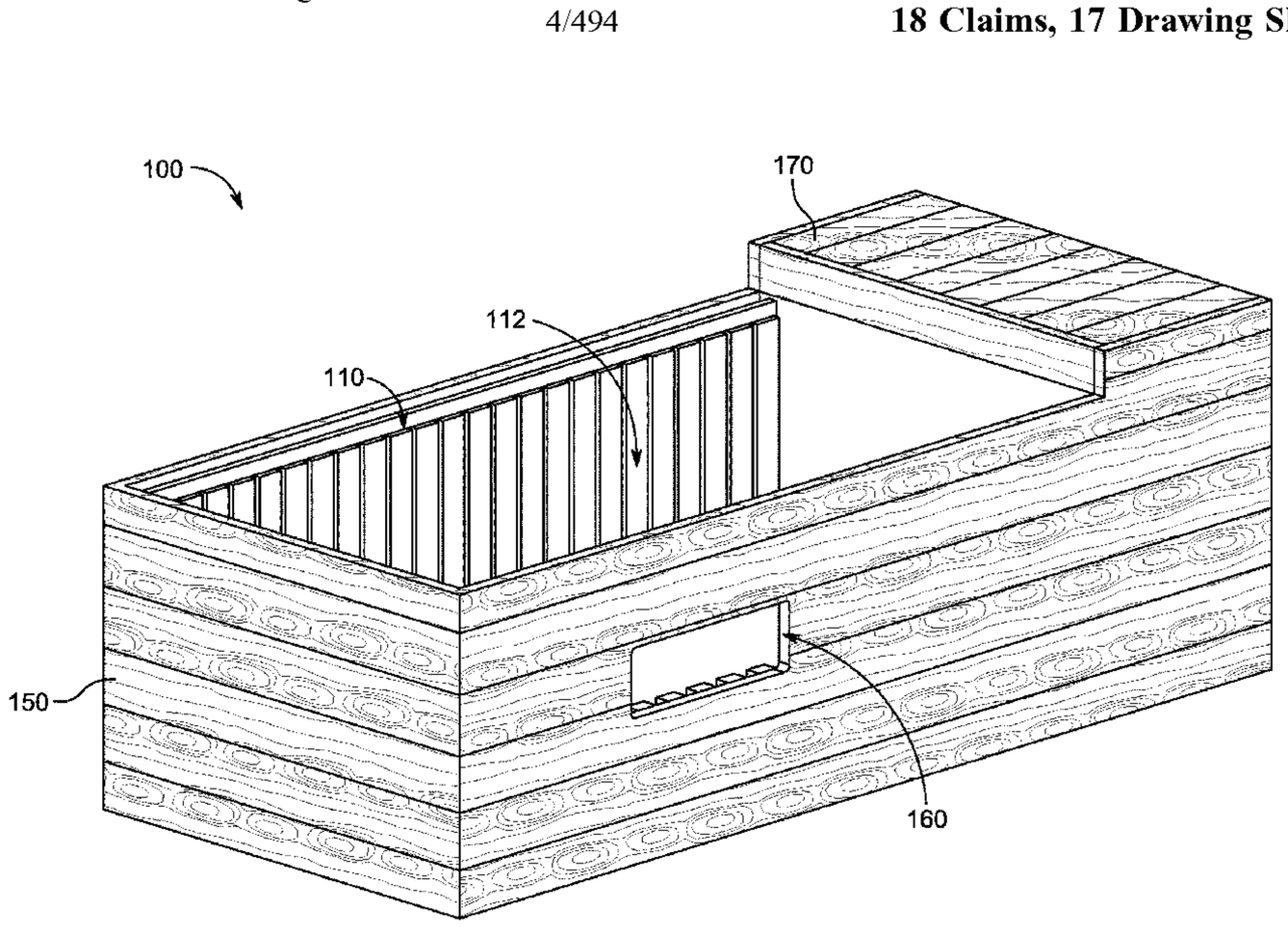
(57) **ABSTRACT**

Swimming containers are disclosed including a first compartment at a first longitudinal end having a roof structure forming at least part of a deck structure, the first compartment having first and second doors providing access to the first compartment. A wall partition connected between the first and second sidewalls provides water-tight separation between the first compartment and a second compartment configured to hold a volume of water. A guide track runs along a longitudinal center of a bottom portion of the container, with first and second wheels disposed on opposite sides of the guide track, and a hook structure disposed at an end of the swimming container at least partially above the guide track.

**18 Claims, 17 Drawing Sheets**



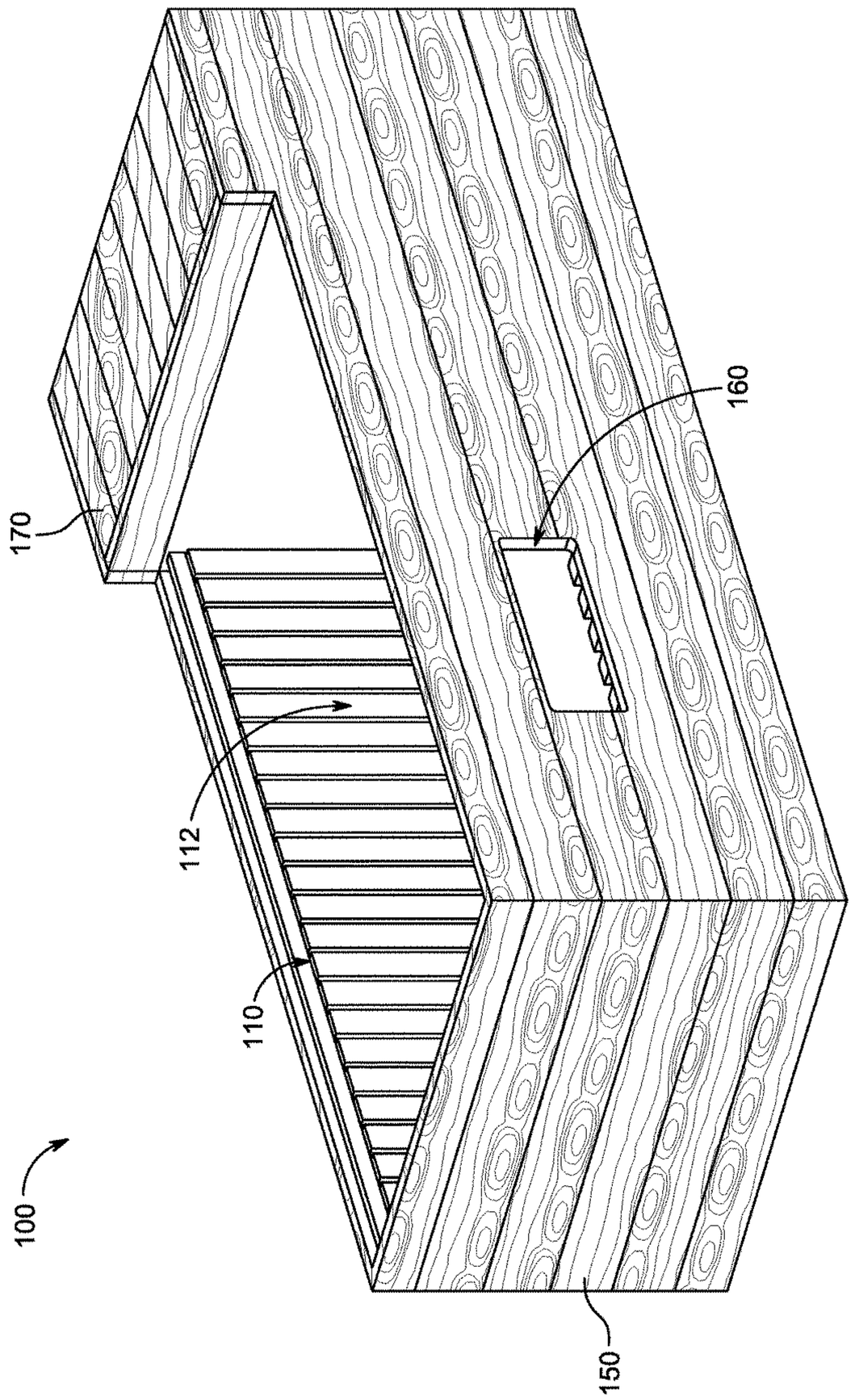



FIG. 1

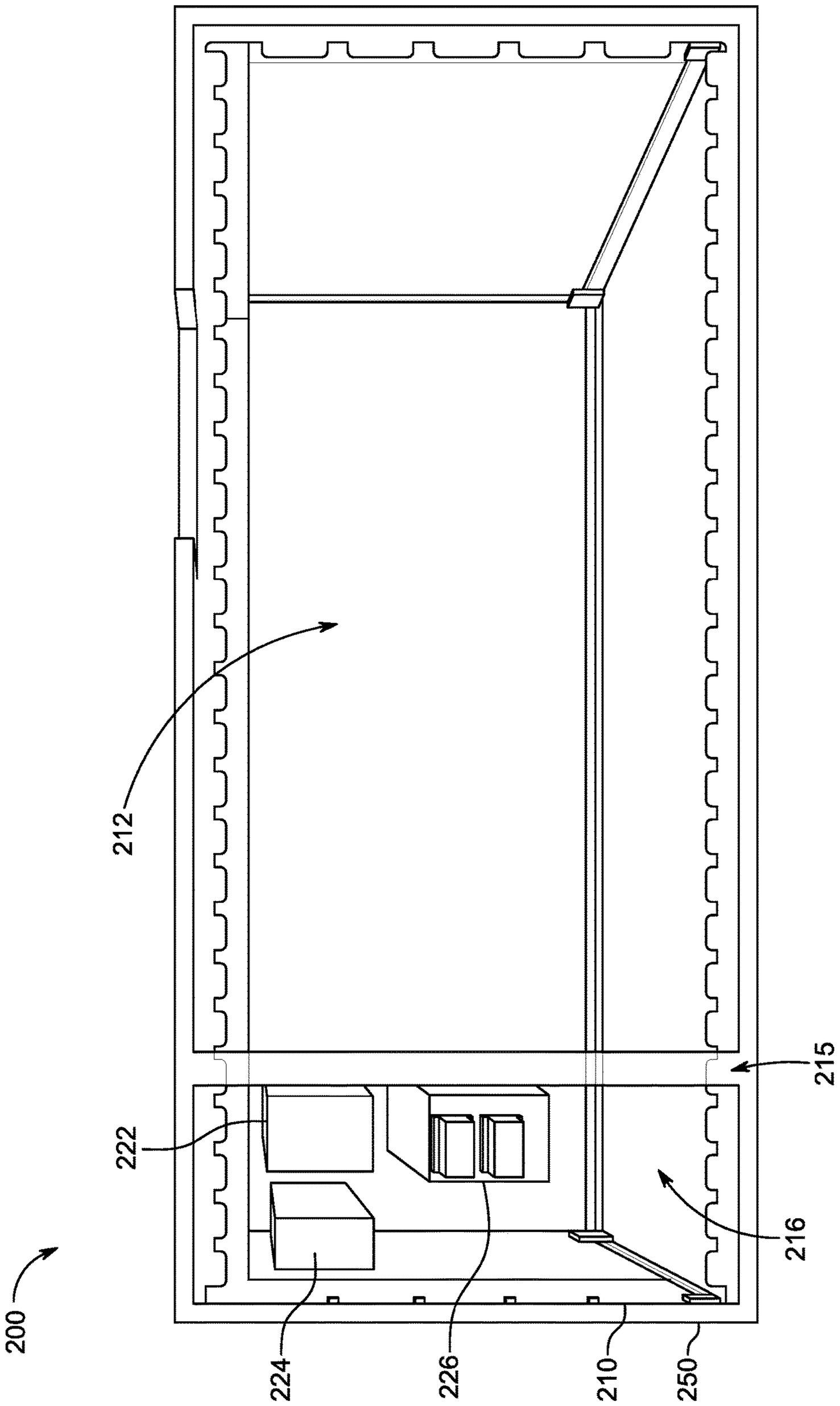



FIG. 2

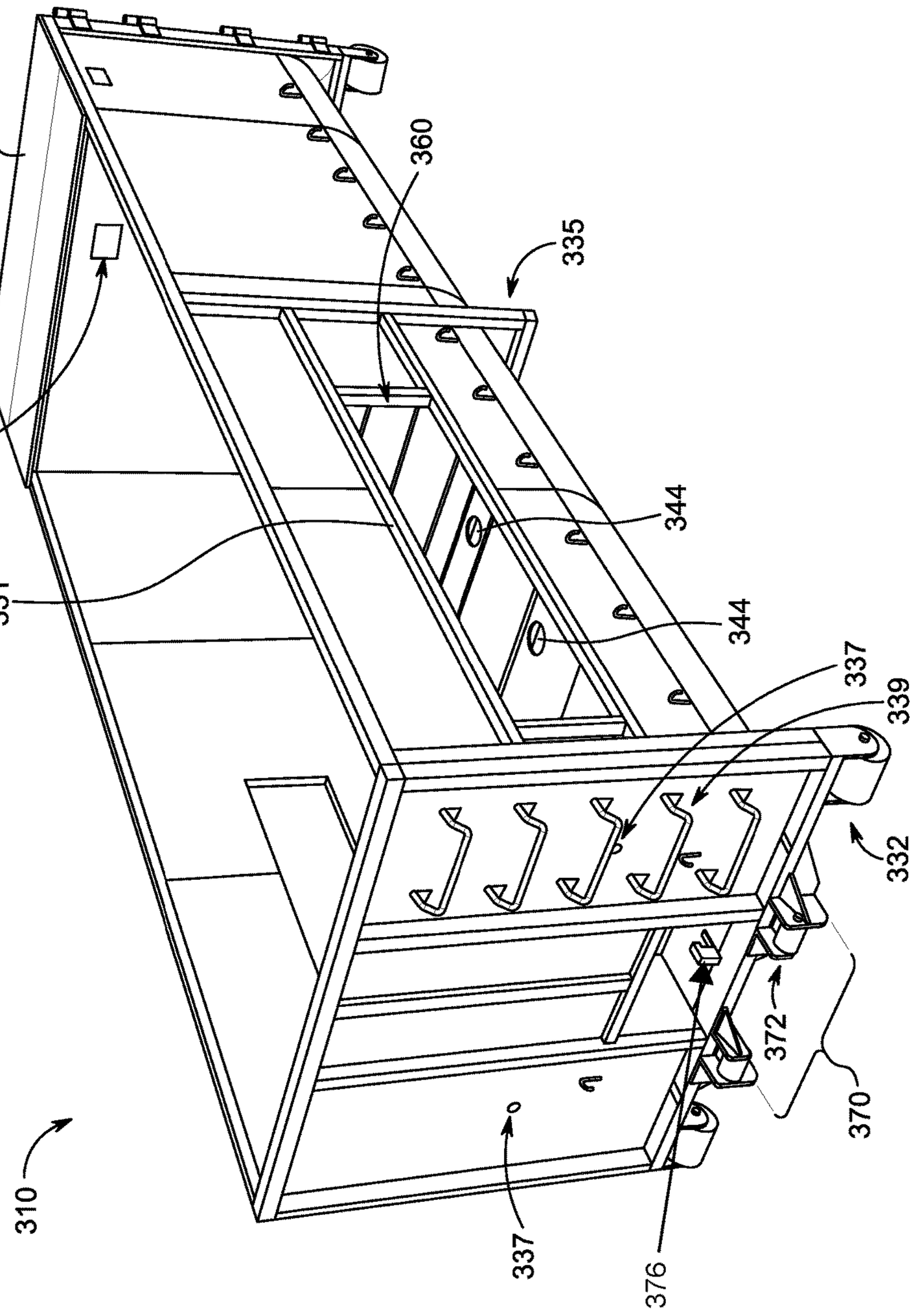



FIG. 3

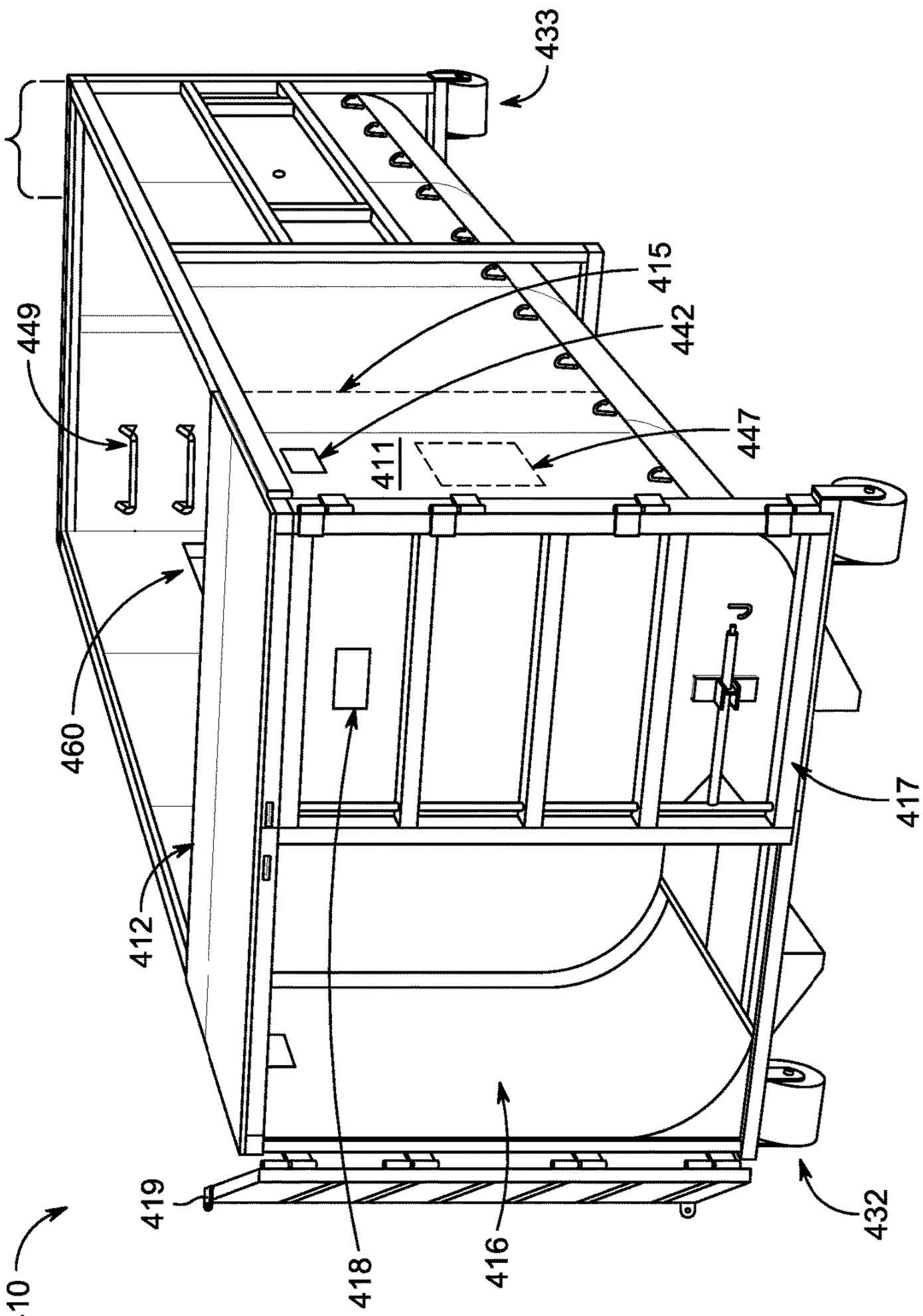



FIG. 4

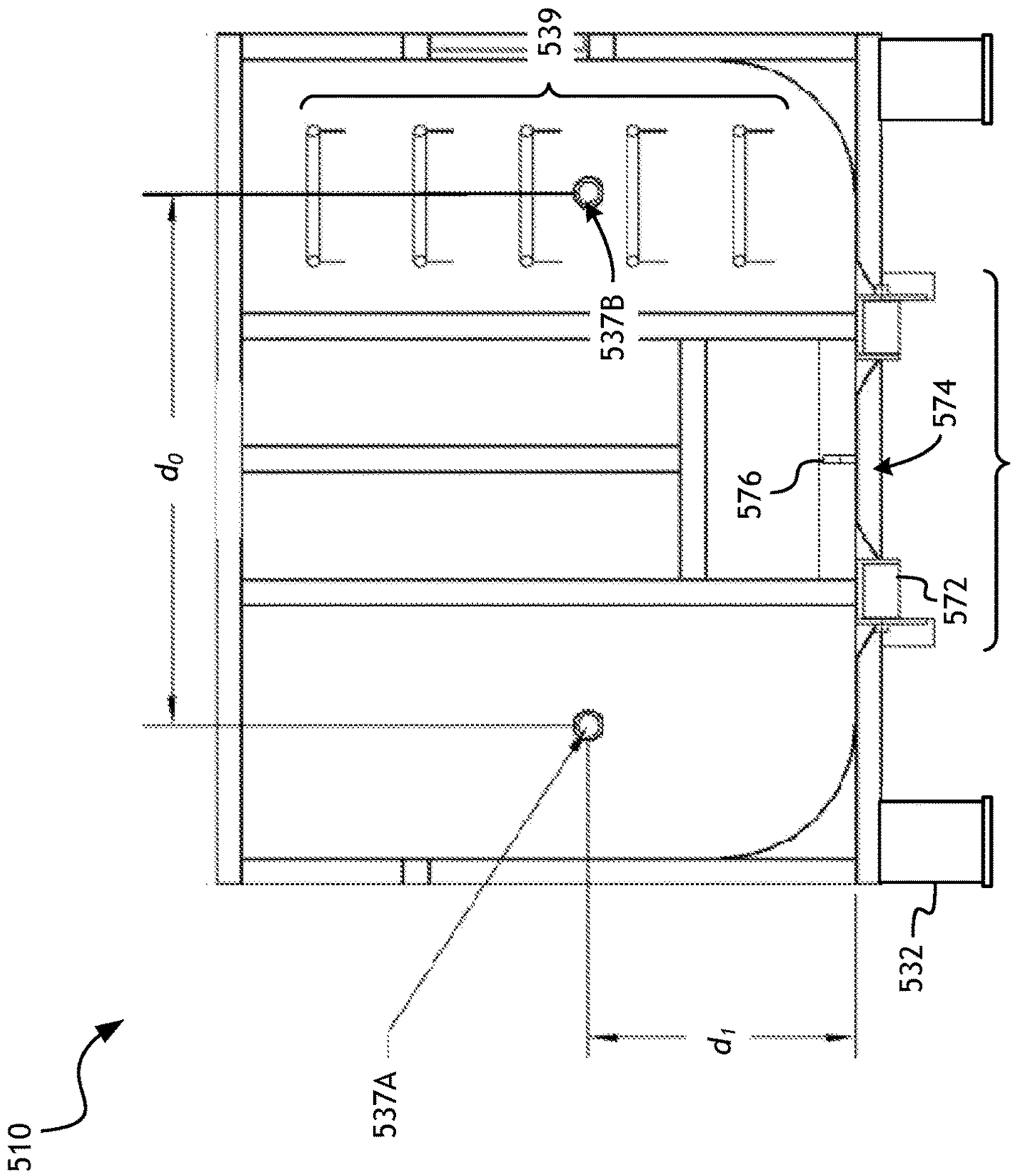



FIG. 5

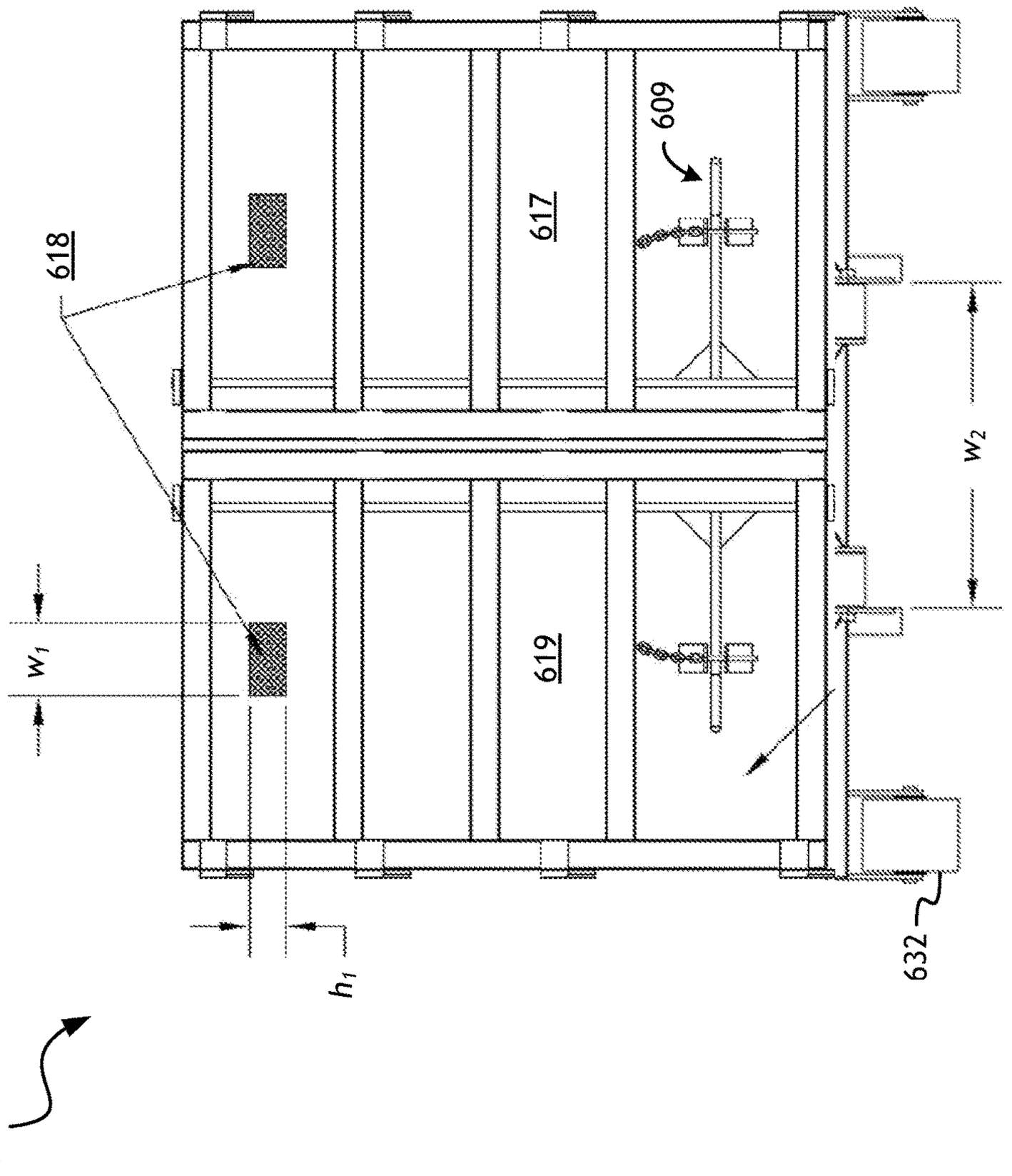



FIG. 6

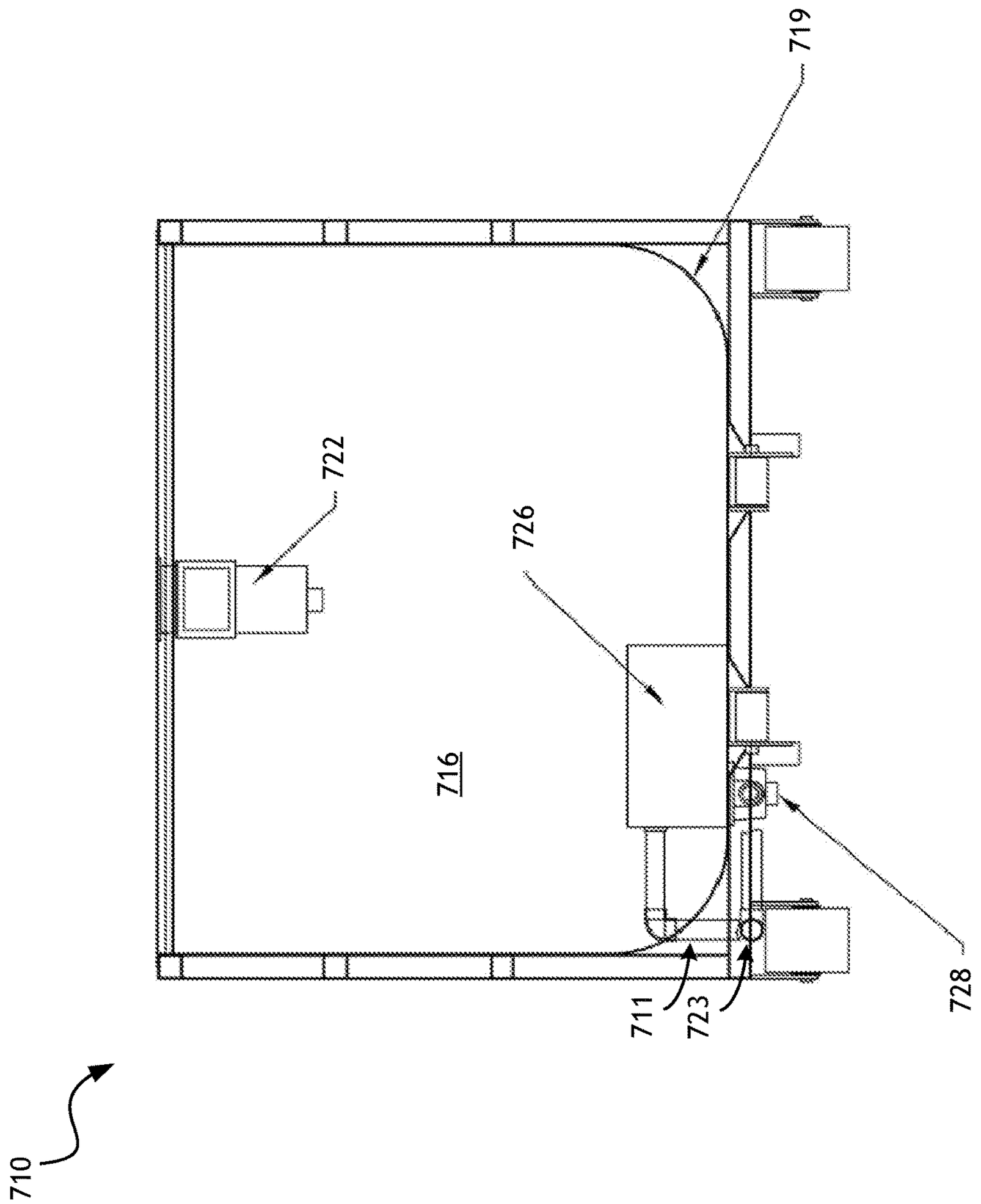



FIG. 7

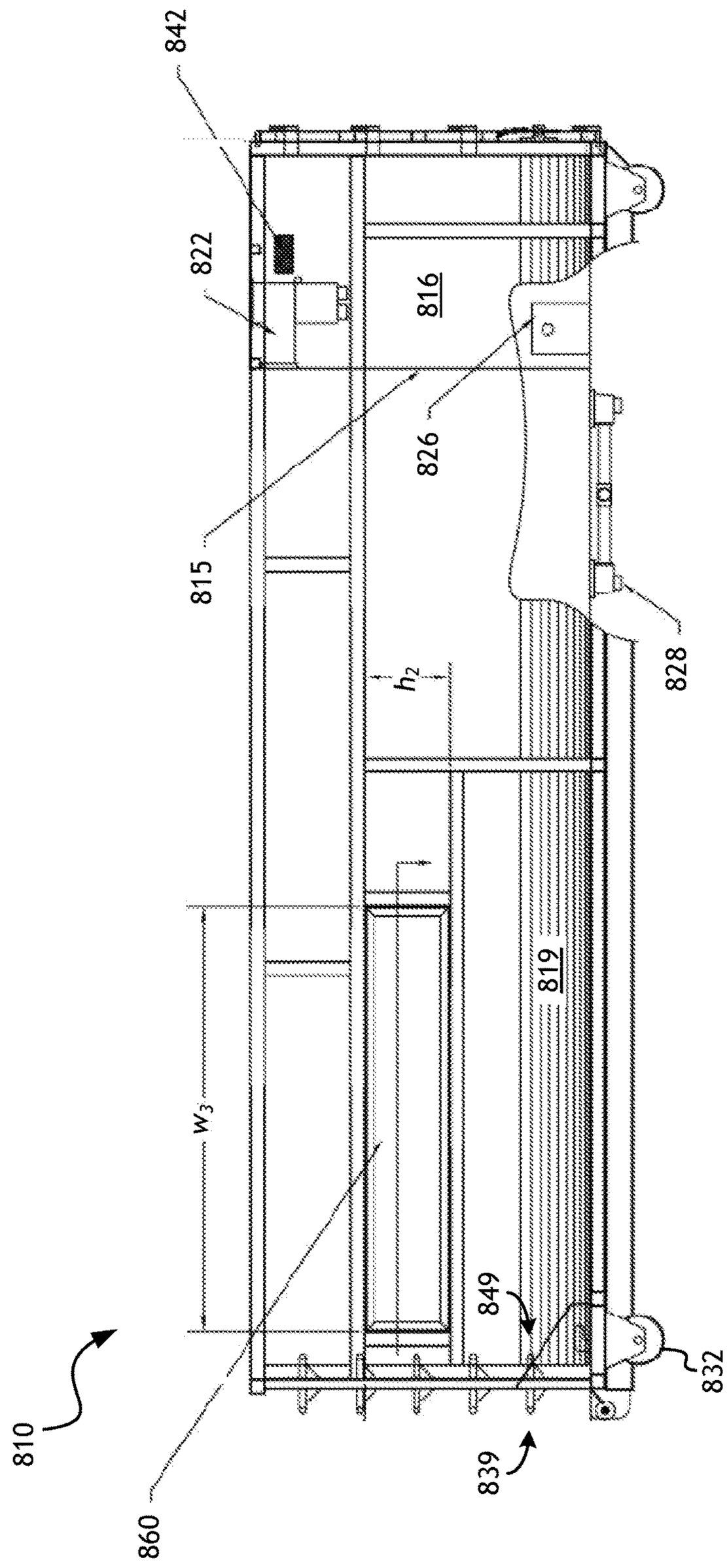
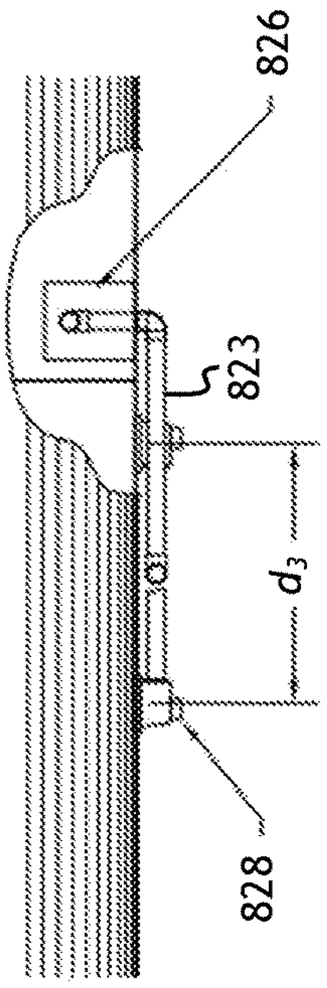

842
822
816
826
815
828
$h_2$
819
$w_3$
849
832
839
810
860

FIG. 8A


826
823
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828

FIG. 8B

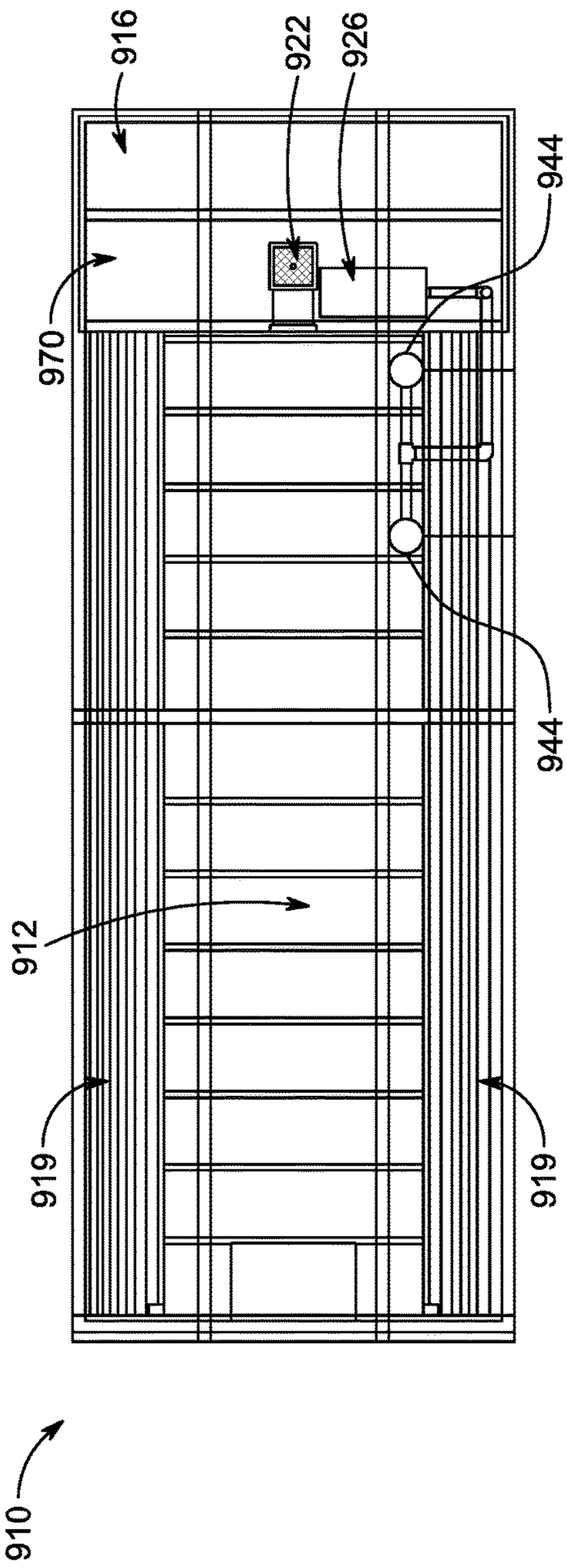


FIG. 9A

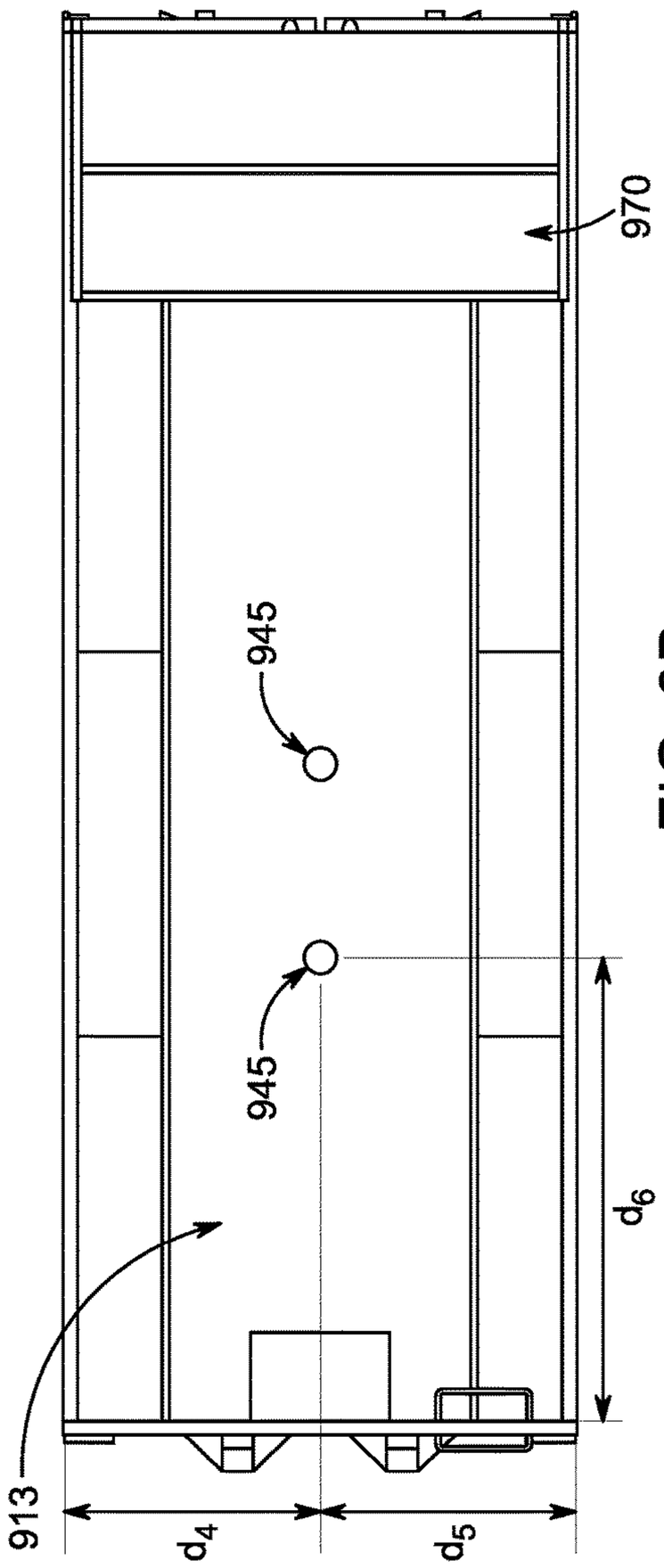


FIG. 9B

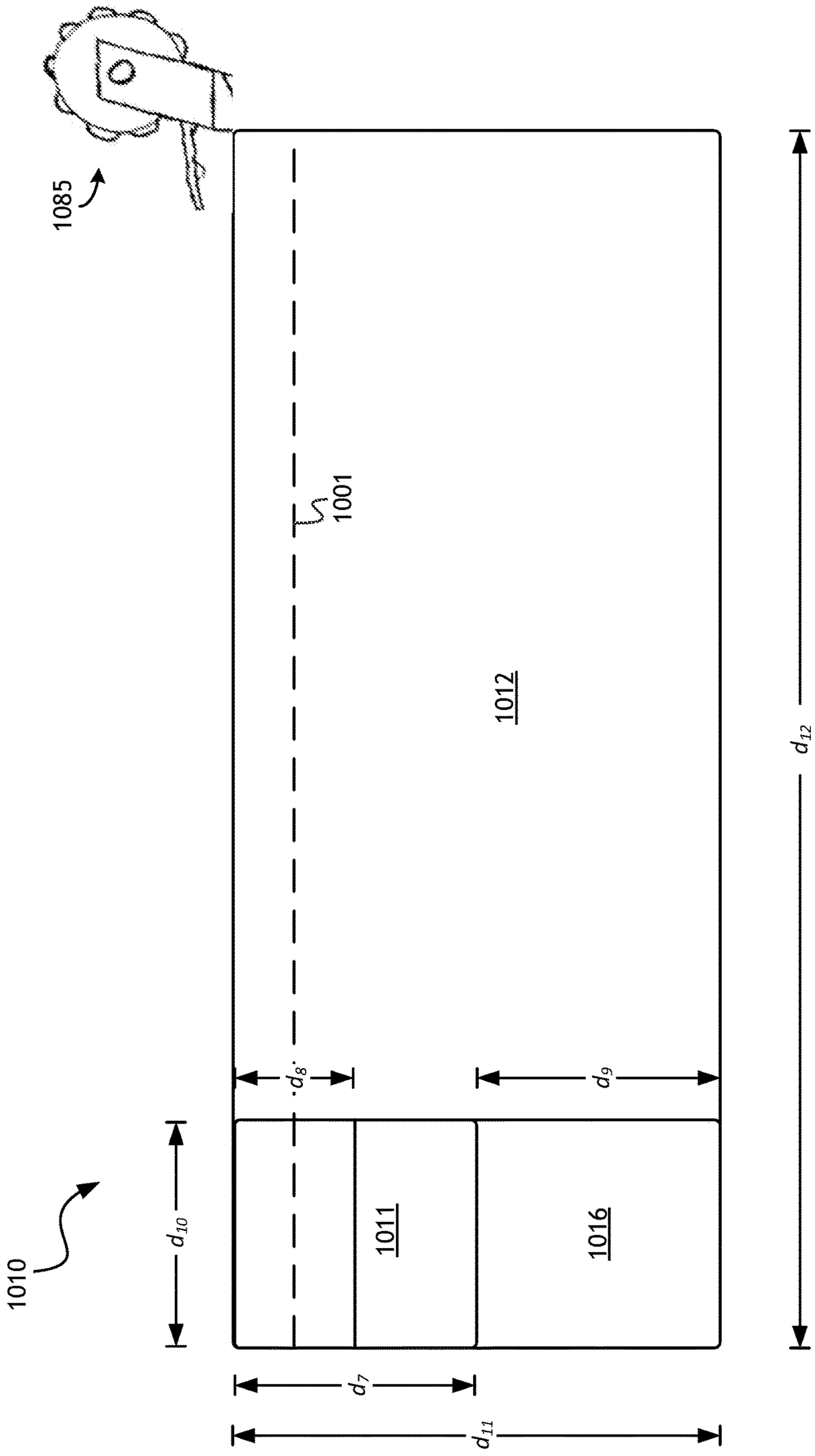


FIG. 10

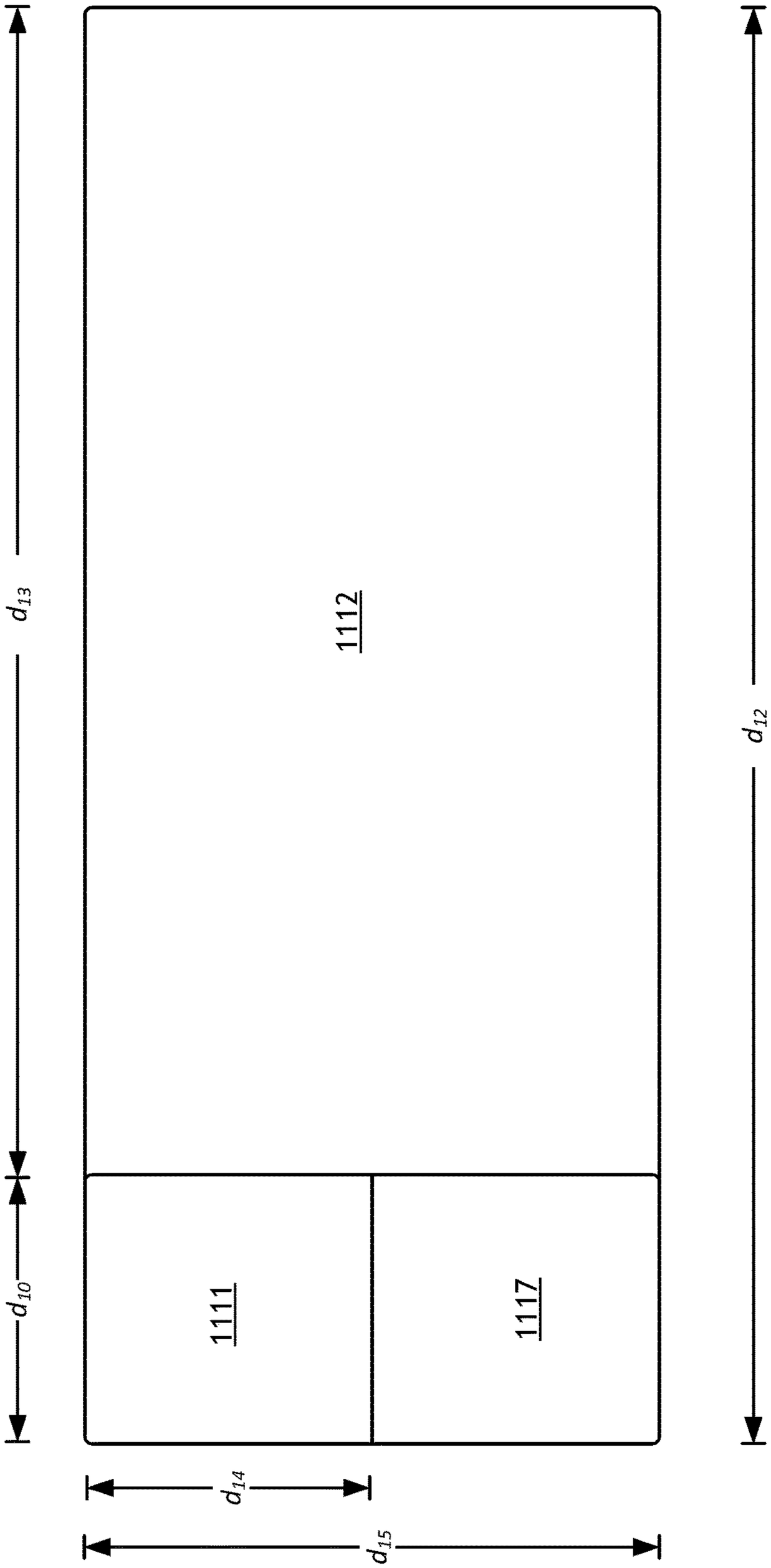


FIG. 11

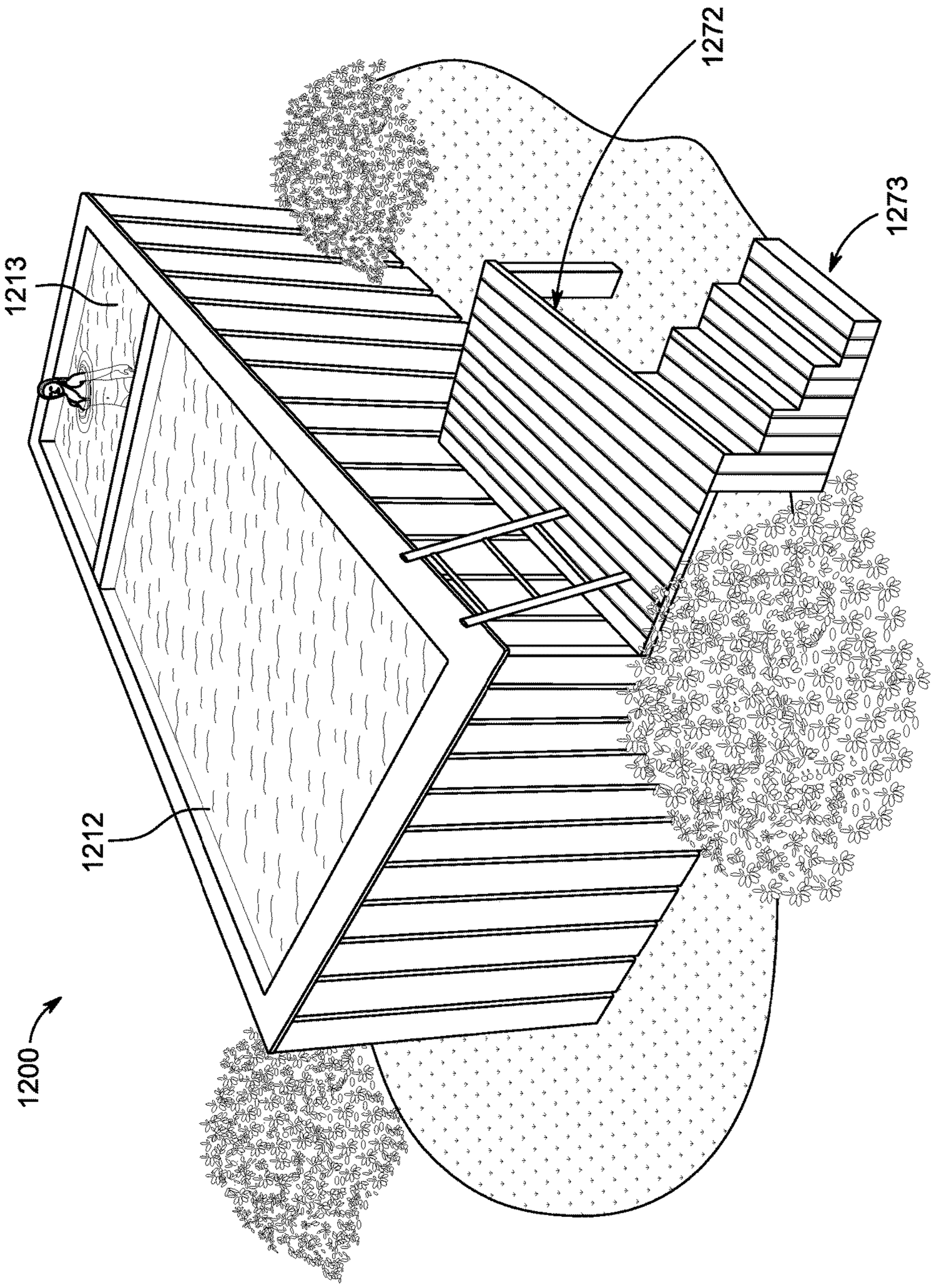


FIG. 12

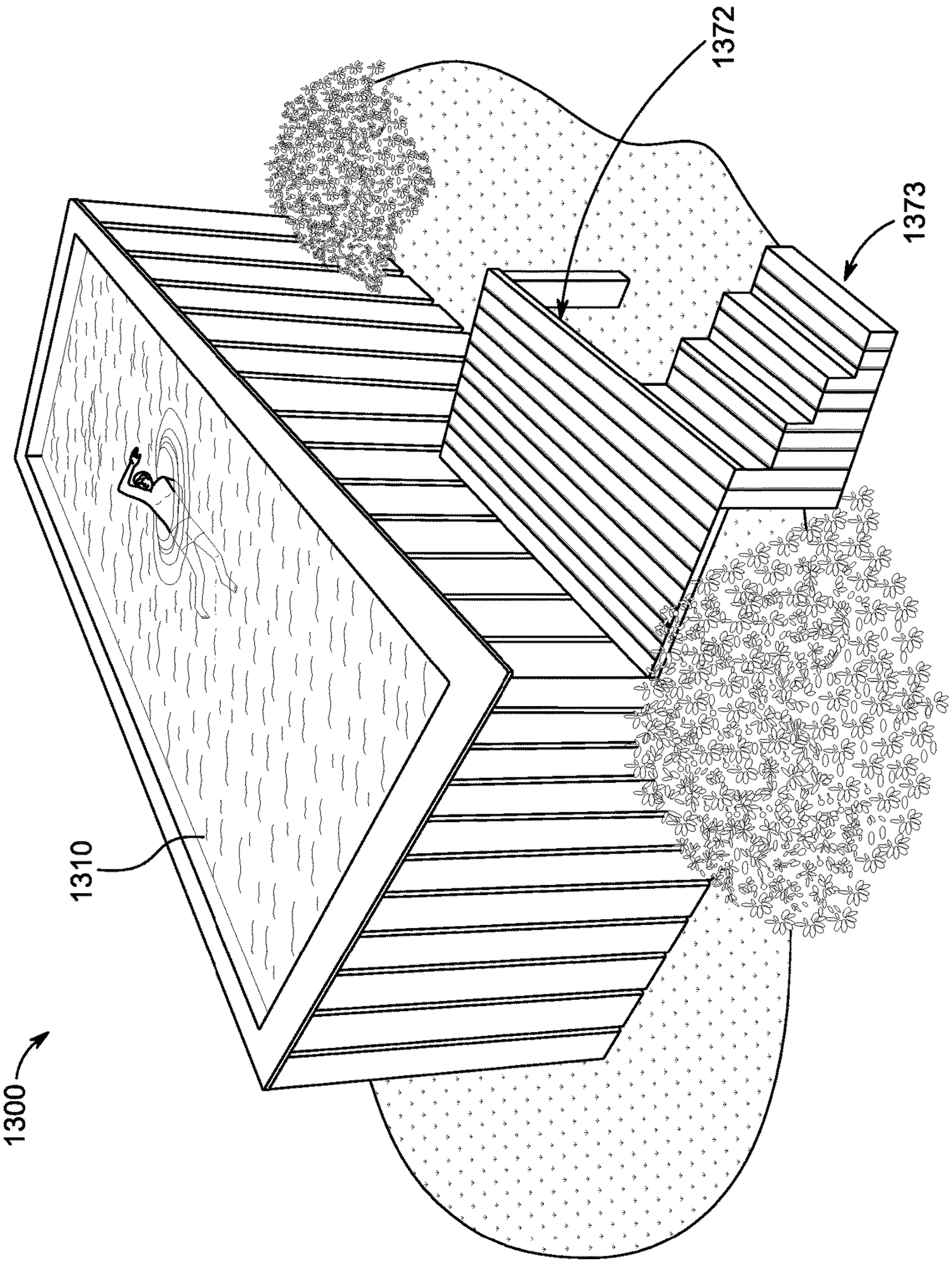


FIG. 13

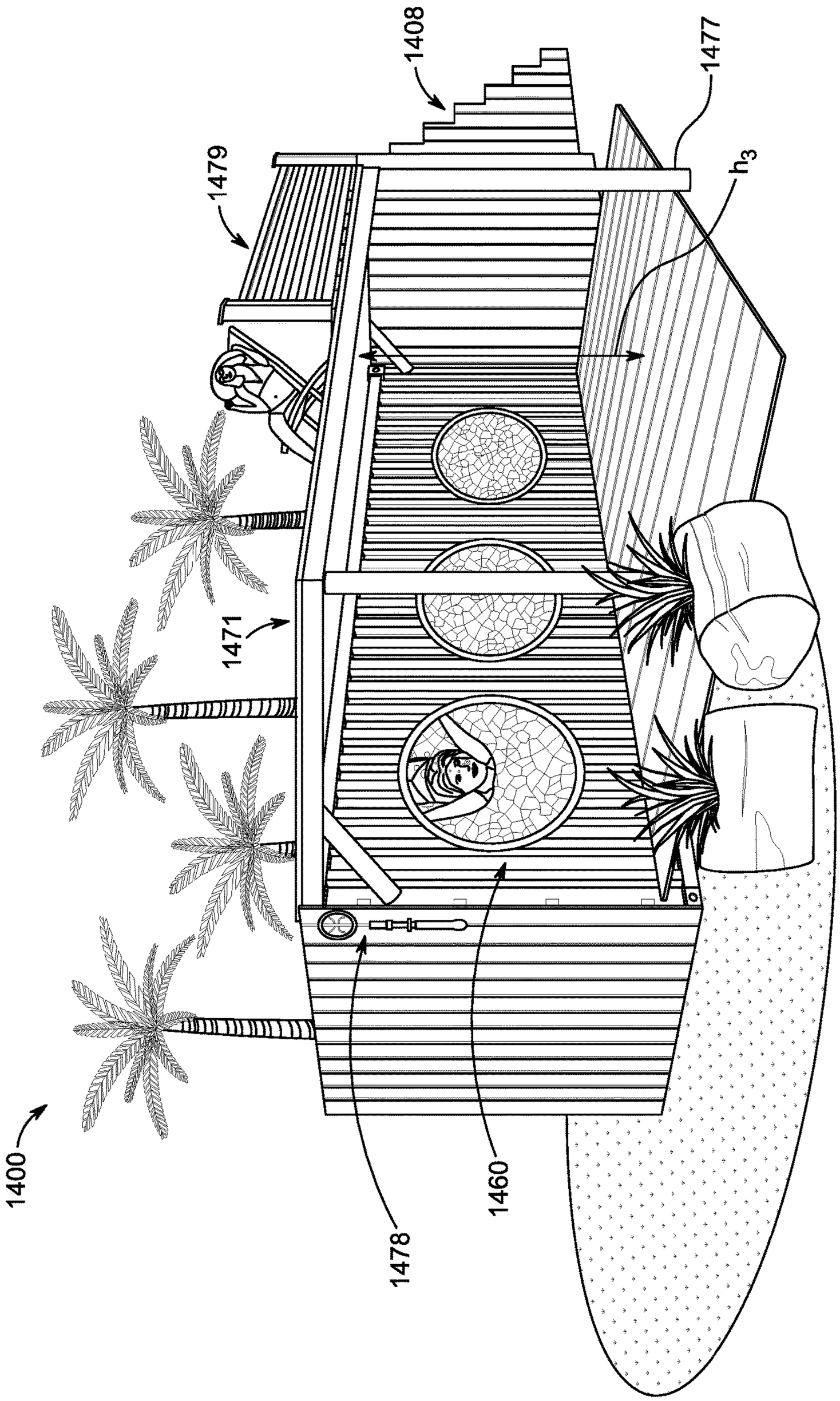


FIG. 14


FIG. 15

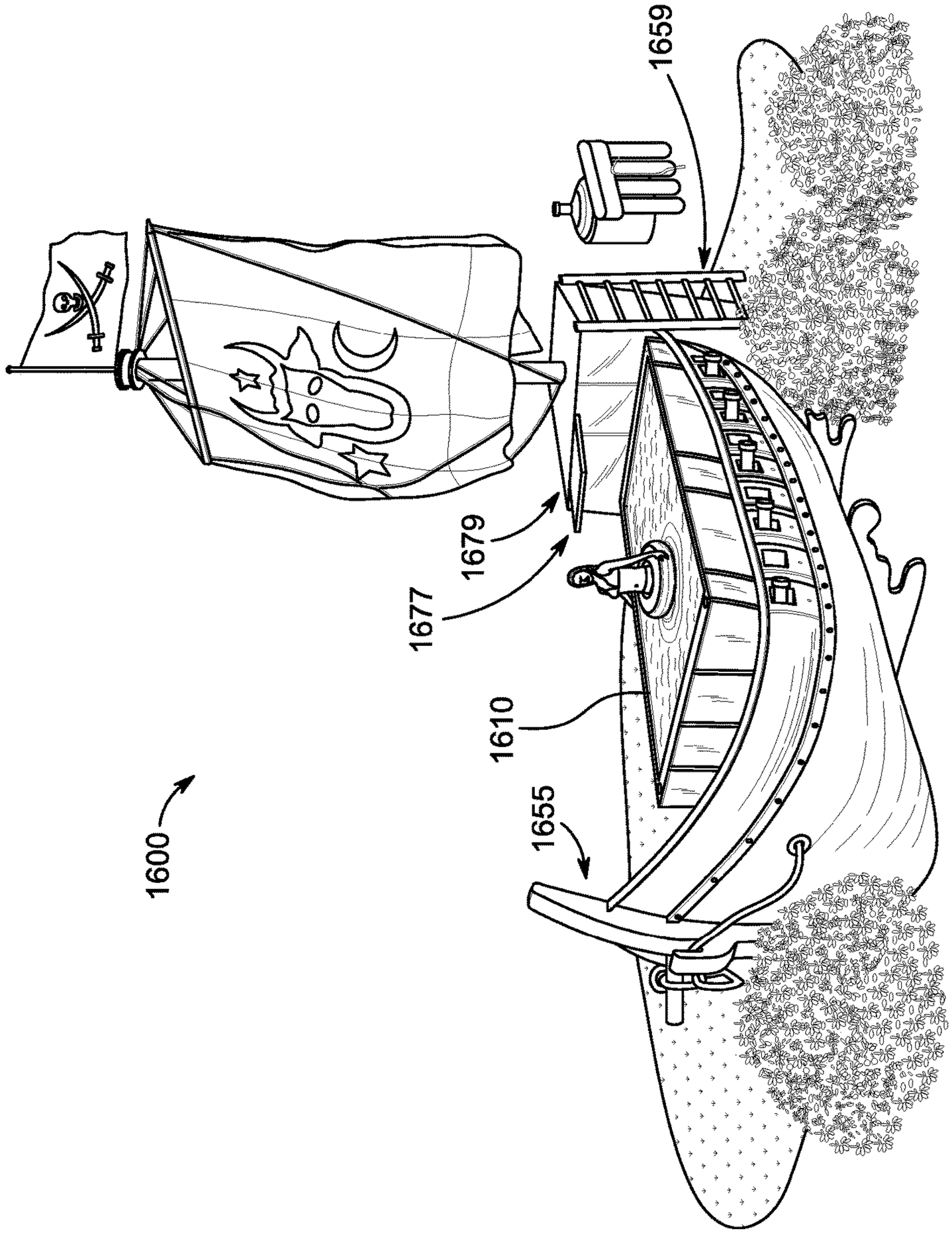


FIG. 16

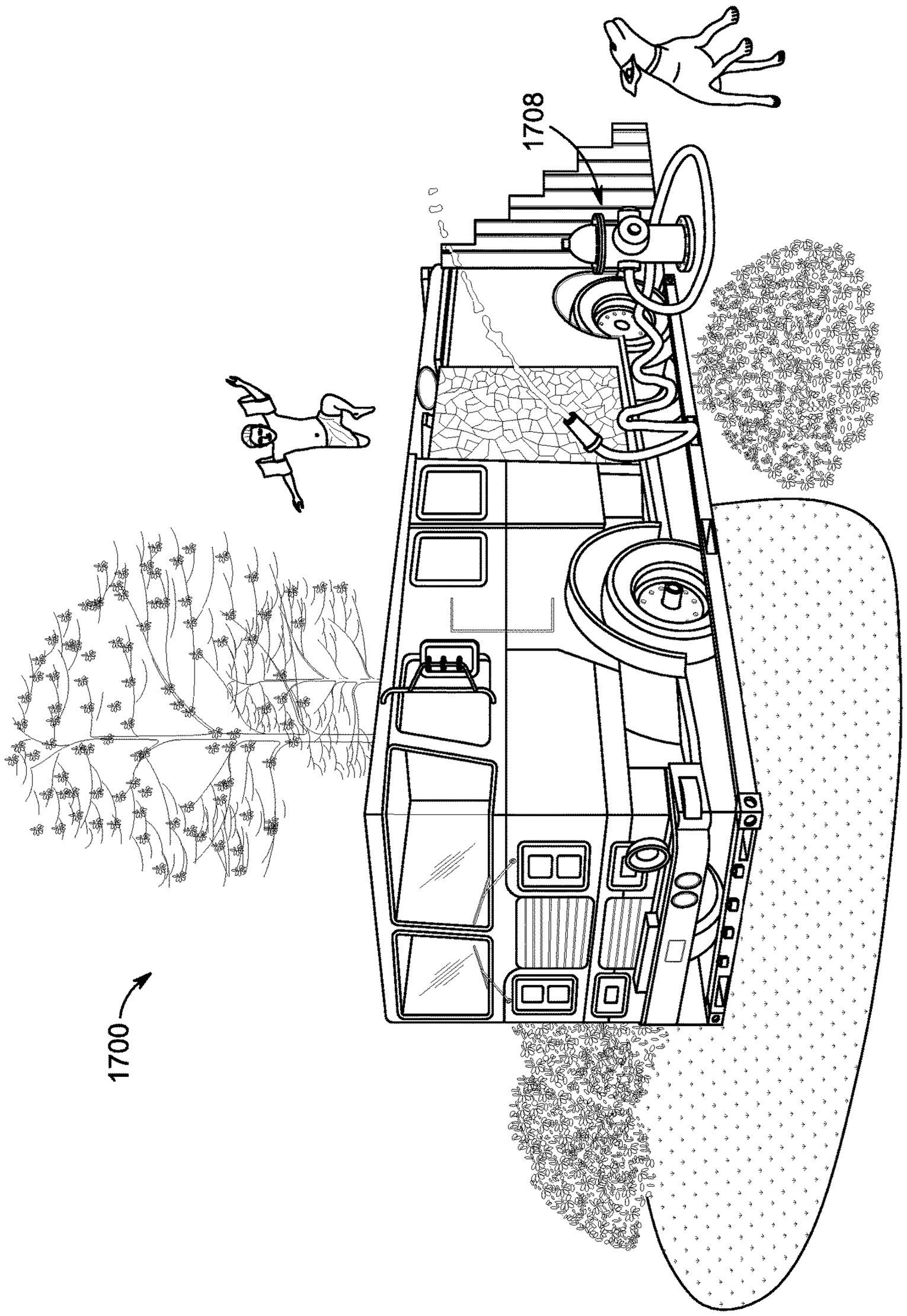


FIG. 17

# SELF-CONTAINED SWIMMING POOL

## RELATED APPLICATION

This application claims priority to U.S. Provisional Application No. 62/145,150, filed on Apr. 9, 2015, entitled SELF-CONTAINED SWIMMING POOL, the disclosure of which is hereby incorporated by reference in its entirety.

## BACKGROUND

Field

The present disclosure generally relates to above-ground swimming pools.

Description of Related Art

Above-ground swimming pools are often cheaper and more convenient to install than in-ground pools. However, above-ground pools can be difficult to transport and install.

## SUMMARY

In some implementations, the present disclosure relates to a swimming container comprising a first compartment at a first longitudinal end of the swimming container having a roof structure forming at least part of a deck structure, the first compartment having first and second doors providing access to the first compartment, a water pump housed within the first compartment, a water filter device housed within the first compartment, first and second sidewalls extending along a length of the swimming container, and a wall partition connected between the first and second sidewalls at a position along the length of the swimming container, the wall partition providing water-tight separation between the first compartment and a second compartment configured to hold a volume of water. The swimming container further comprises a bottom portion comprising one or more drain apertures, a guide track that runs along a longitudinal center of the bottom portion, first and second wheels disposed on opposite sides of the guide track at a second longitudinal end of the swimming container, and a hook structure disposed at the second longitudinal end of the swimming container at least partially above the guide track.

In certain embodiments, at least one of the first and second doors comprises a vent aperture. The swimming container further comprises a pipe running beneath the bottom portion and connecting the one or more drain apertures to the water pump in the first compartment. In certain embodiments, the first sidewall includes a window comprising a rigid, transparent panel structure.

The deck may be configured to provide an ingress/egress platform for the second compartment. The swimming container may further comprise one or more removable exterior panels secured to one or more of the first and second sidewalls. The swimming container may further comprise a support beam extending vertically along each of the first and second sidewalls and below the bottom portion to provide support for the swimming container. The support beam may be integrated with a window frame of the first sidewall.

In certain embodiments, the bottom portion further comprises support members at each of four corners of the container. For example, the support members may comprise two wheel supports and two foot supports. In certain embodiments, the swimming container further comprises a rectangular upper frame at least partially lining an upper perimeter of the second compartment, the upper frame including a receptacle configured to removably receive a connection portion of a recessed platform structure. For example, the recessed platform structure may form a shallow-end standing surface for the second compartment when secured to the upper frame. Alternatively, the recessed platform structure may form a seat disposed within the second compartment when secured to the upper frame. The swimming container may further comprise a radiused floor surface forming a longitudinal cavity between the radiused floor surface and the bottom portion. In certain embodiments, a pipe is disposed within the longitudinal cavity that is connected to the water filter device.

In some implementations, the present disclosure relates to a method of manufacturing a swimming container. The method may involve providing an open-top container having a rectangular prism shape. For example, the container may include a front end wall, first and second sidewalls, a back end wall formed of first and second doors, and a bottom structure comprising a guide track that runs along a longitudinal center of the bottom structure, first and second wheels secured on opposite sides of the guide track, and a hook structure disposed proximate the front end wall at least partially above the guide track, the front end wall, the first and second sidewalls, the back end wall, and the bottom structure forming a trench. The method may further involve dividing the trench into a first compartment and a second compartment at least in part by attaching a wall partition to the first and second sidewalls in a substantially water-tight attachment, forming a deck structure at least in part by attaching a roof structure to the first and second sidewalls, the back end wall, and the wall partition at least partially above the first compartment, disposing a water pump and a water filter within the first compartment, forming an aperture in the second compartment, and connecting the water pump to the aperture.

In certain embodiments, the method further involves cutting a vent aperture in the first door. The method may further involve forming a receptacle in an frame lining at least part of the second compartment, the receptacle being configured to removably receive a connection portion of a recessed platform structure. For example, the recessed platform structure may form a shallow-end standing surface for the second compartment when secured to the upper frame. Alternatively, the recessed platform structure may form a seat disposed within the second compartment when secured to the upper frame.



## BRIEF DESCRIPTION OF THE DRAWINGS

Various embodiments are depicted in the accompanying drawings for illustrative purposes, and should in no way be interpreted as limiting the scope of the inventions. In addition, various features of different disclosed embodiments can be combined to form additional embodiments, which are part of this disclosure. Throughout the drawings, reference numbers may be reused to indicate correspondence between reference elements.

FIG. **1** is a perspective view of a swimming container in accordance with one or more embodiments disclosed herein.

FIG. **2** is a cross-sectional side view of a swimming container according to one or more embodiments.

FIG. **3** illustrates a perspective view showing front and side portions of an interior container for a pool container assembly according to one or more embodiments.

FIG. **4** is a perspective view showing back and side portions of a swimming container according to one or more embodiments.

FIG. **5** illustrates a front view of a swimming container according to one or more embodiments.

FIG. **6** is a back view of a swimming container according to one or more embodiments.

FIG. **7** provides a cross-sectional view of a swimming container according to one or more embodiments.

FIG. **8**A shows a side view of a swimming container according to one or more embodiments.

FIG. **8**B provides a close-up view of certain components illustrated in the diagram of FIG. **8**A according to one or more embodiments.

FIG. **9**A provides an overhead view of a container including a swimming chamber according to one or more embodiments.

FIG. **9**B provides yet another overhead view of a swimming container according to one or more embodiments.

FIG. **10** illustrates a side view of a swimming container according to one or more embodiments

FIG. **11** illustrates a top-down view of a pool container according to one or more embodiments.

FIG. **12** illustrates a perspective view of a swimming container according to one or more embodiments.

FIG. **13** illustrates a perspective view of a swimming container according to one or more embodiments.

FIG. **14** illustrates a pool container having a pop-up deck feature according to one or more embodiments

FIG. **15** illustrates a swimming container according to one or more embodiments.

FIG. **16** illustrates swimming container according to one or more embodiments.

FIG. **17** illustrates a perspective view of a swimming container according to one or more embodiments.

## DETAILED DESCRIPTION

While certain embodiments are described, these embodiments are presented by way of example only, and are not intended to limit the scope of protection. Indeed, the novel methods and systems described herein may be embodied in a variety of other forms. Furthermore, various omissions, substitutions and changes in the form of the methods and systems described herein may be made without departing from the scope of protection.

The headings provided herein are for convenience only and do not necessarily affect the scope or meaning of the claimed invention. Disclosed herein are example configurations and embodiments relating to above-ground swimming containers.

Swimming Container Assembly

FIG. **1** is a perspective view of a swimming container **100** in accordance with one or more embodiments disclosed herein. In certain embodiment, as illustrated, the swimming container, or at least a portion thereof, may have a substantially rectangular prism-like shape. The swimming container **100** may comprise an inner container structure **110** configured to form an inner chamber designed and proportioned to hold a volume of water for swimming therein, or for other purposes. The swimming container **100** may further comprise an exterior surfacing or structure **150** that may serve to provide additional support, structure, and/or aesthetic features for the swimming container **100**.

The swimming container **100** may further comprise a deck or platform **170**, which may provide support for standing thereon, or for other purposes. In certain embodiments, the deck **170** is designed to lie above a portion of the swimming container **100** configured to house one or more pool components, such as one or more skimmers, pumps, filters, or other machinery or devices that provide functionality for operating the pool **100**. The deck **170** may provide at least partial protection for pool components, or other components of the swimming container **100** against, for example, inclement weather, debris, or other potential hazards. The deck **170** may provide sufficient support or strength to support the weight of multiple individuals simultaneously, and may serve as a point of ingress and/or egress with respect to the water chamber **112**.

The interior structure **110** and/or exterior structure **150** may include one or more apertures or transparent portions which may provide a window **160** whereby water within the chamber **112** may be viewable from an exterior perspective. In certain embodiments, the window **160** may comprise an acrylic or other rigid, at least partially transparent, window panel structure, which may allow for the container to hold water within the water chamber **112** at a vertical level above at least a portion of the window **160**. Although the window feature **160** illustrated in FIG. **1** details a substantially rectangular shaped window, it should be understood that swimming containers according to embodiments disclosed herein may include any number, size or shape of window features. Furthermore, although the window feature **160** is illustrated on a first side portion or panel of the swimming container **100**, window features may be present on either or both sides of a four-sided swimming container like that shown in FIG. **1**.

The exterior structure or surface **150** may comprise wood or other type of paneling which may provide structural support and/or aesthetic features which may be desirable as adding to the decorative quality of the swimming container **100**. Any type of material or shape or configuration of pieces or structures may be utilized to construct the exterior surface **150**, such as new or reclaimed wood, plywood, plastic, vinyl, or the like, each of which may have various uses and/or benefits vis-à-vis other possible options. In certain embodiments, the exterior paneling or surface **150** may be removable or reconfigurable, based on various considerations, such design considerations or the like.

Between the interior structure **110** and the exterior structure **150**, a cavity may exist which may be filled with, for example, insulation or other material. Insulation disposed between the two layers may advantageously improve efficiency with respect to temperature conditioning of water within the water chamber **112**. For example, when it is desirable for water to have a temperature that differs to some degree from the environmental temperature outside of the swimming container **100**, such as for purposes of providing comfort to users of the swimming container, the insulation may reduce the surface area through which at least some of the thermal energy in the container water may transfer out of and into the water housed in the water chamber **112**.

Although not illustrated in FIG. **1**, the swimming container **100** of FIG. **1** may have associated therewith, or integrated into the structure thereof, one or more stair and/or latter features to aid in the ingress and/or egress to and/or from the pool chamber **112** by users thereof.

FIG. **2** is a cross-sectional side view of the swimming container **200**, which may be similar in certain respects to the swimming container **100** of FIG. **1** described above. The swimming container **200** of FIG. **2** includes an interior container **210**, as well as an exterior covering or surface **250**. In certain embodiments, as shown, the interior container **210** may comprise a plurality of partitioned areas or chambers, such as the illustrated swimming chamber **212**, as well as the component housing chamber **216**. The two separate chambers **212**, **216** may be divided by at least one partition structure **215**, which may be a vertical wall panel disposed between the two chambers **212**, **216**. As it may be desirable

for the swimming chamber **212** to hold a volume of water for swimming, the partition **215** may advantageously be secured and/or positioned with respect to the interior container **210** such that it is water-tight, thereby preventing water contained within the swimming chamber **212** from flowing into the pool component housing chamber **216**. Due to the mechanical and/or electrical features of the various pool components housed within the pool component housing **216**, it may be desirable to prevent, or at least reduce the effects and/or risk of substantial amounts of water flowing freely within the housing chamber **216**.

The swimming chamber **212** may be referred to herein as a primary or main compartment of the swimming container **200**. In certain embodiments, the interior chamber **210** is constructed from a dumpster container structure. It may be desirable for such a structure to be treated in a manner as to improve the water-holding characteristics of the container, at least with respect to the swimming chamber **212**. Therefore, the various corners, creases, seems, and/or other features of the interior container **210**, particularly of the swimming chamber **212**, may comprise water-tight welds, water-proof panes/panels or other surfaces or materials in order to improve the ability of the container to hold large volumes of water therein.

The swimming chamber **212** may be used primarily as a water housing, wherein users may swim for recreational, therapeutic, or other purposes in the swimming chamber **212** when a volume of water is contained therein. In order to facilitate the use of the swimming chamber **212** for swimming purposes, it may be desirable for swimming components, such as one or more pumps, filters, skimmers, jets, or the like, to function in connection with the swimming chamber **212** for the purpose of cleaning, heating, or otherwise treating the water housed in the swimming chamber **212**. Therefore, one or more jet intake and/or outtake channels may lead between the swimming chamber **212** and the pool component housing chamber **216**, or other exterior chamber or area.

The pool components housing chamber **216**, which may be referred to herein as a secondary compartment of the swimming container **200**, may house one or more machines or devices configured to provide pool maintenance system functionality for the swimming container **200**. In particular, the secondary chamber **216** may include one or more water and/or air pump devices **226**, water filtration, or treatment devices **224**, water heating components **222**, and/or other components. The pump system **226** may be designed to accommodate the water volume capacity of the swimming chamber **212** with regard to workload capability. The filtration system **224** may be any desirable filtration system, such as reverse osmosis filter, sand filter system, cartridge filter system, diatomaceous earth (D. E.) filter, or other type of filter system. Although the swimming container **200** is illustrated as including a heating system **222**, in certain embodiments, the pool container is not equipped with water heating capability.

The partition structure **215** may comprise a steel panel welded to one or more portions of the interior wall of the interior container **210**. For example, the partition **215** may be welded or secured on three sides to the interior of the interior container **210**, such as on a first side, a bottom side, and a second side. In certain embodiments, the partition **215** is removable and/or repositionable. For example, in certain embodiments it may be possible to remove the partition **215** at least in part by sliding the panel upward or in a forward or backward direction in order to modify the volume of the chamber **212** with respect to that of the chamber **216**.

In certain embodiments, one or more door structures may be positioned adjacent to the component housing chamber **216** to thereby allow access to the chamber. Access to the housing chamber **216** may be advantageous for the purpose of manipulating and/or operating components disposed therein. In certain embodiments, the pool components housing chamber **216** houses an electrical system (not shown), which may be used to provide electrical power to one or more components of the pool container **200**. In certain embodiments, the electrical subsystem may be powered via a cable that extends externally from the pool container **200**, and may be plugged in to a power source external to the pool container **200**.

FIG. **3** illustrates a perspective view showing a front and side portions of an interior container **310** for a pool container assembly. In certain embodiments, the container **310** is a role-off container comprising one or more wheels **332** as well as a track system **370**, which may extend along a longitudinal axis of the container **310**, such as along the bottom portion of the container, as shown.

The container **310** may be an open-top dumpster having a substantially-rectangular footprint. The container **310** may utilize one or more wheels **332** to facilitate rolling of the container **310** into a desired position. The container **310** may be designed to be transported by a roll-off truck. The container **310** may include one or more swinging doors (not shown) on a back end of the container to provide access to a secondary chamber of the container **310**.

The container **310** may have a rectangular footprint conforming to the size of a roll-off truck designed to transport containers having at least some of the physical characteristics of the container **310**. The shape, features and configuration of the container **310** may therefore allow for portability of the swimming container **310**, which may provide advantages over other swimming structures that may not be loaded onto standard roll-off trucks for transportation thereof. The weight of the container **310** may be such as to meet compliance standards with road-use and safety laws and regulations.

The container **310** may be designed and configured to be transported and placed by a roll-off truck, wherein such tasks may be performed at least in part by using a cable and winch system, or a hook-lift system. The container **310** may have one or more features which may allow for securing a hook or cable thereto for the purpose of loading the container to a truck and/or securing the container to the truck during transport. To unload the container **310**, the truck may raise a hydraulically-operated bed component/member to allow the one or more wheels (e.g., **332** and/or **372**), in combination with gravity and/or other features of the container, to cause the container **310** to roll-off of the bed of the truck onto a landing surface, wherein the container is maintained in a substantially straight alignment using **370** of the roll-off assembly associated with the bottom portion of the container **310**. In certain embodiments, the container may be configured to be secured to a cable that may assist in slowly lowering the container **310** onto the landing surface. For example, the container **310** may include a hook or other attachment member **376** (e.g., ring, loop, or the like) for securing a cable to the container **310**. The hook **376** may therefore be disposed at or toward a front side or portion of the container, as shown.

The track system **370** of the container **310** may help guide the container in loading or unloading from a truck or other machinery, and may provide support for the container when secured to a truck or the like. The track **570** may run along a longitudinal center of the container **310**. The container **310**

may comprise additional support members which may provide support for the container **310** during transit as well as while stationary in a landing position. For example, the container **310** may include one or more support beams or bars, such as the support beam **335** shown. Although only a single support beam is shown, certain embodiments may comprise a plurality of support beams, which may be physical structures integrated with the container **310** along longitudinal positions of the body of the container. The support member **335** may extend from the body of the container to contact a surface, such as the ground, when the container is in a resting position

The container **310** further comprises one or more support members disposed at corner regions of the container, or other regions. Although the container **310** shows wheel support members (e.g., **332**) at each of the viewable bottom corners of the container, in certain embodiments, one or more of the corner/bottom support structures may comprise foot members or other support structures, and need not comprise wheels. The collective support features of the container **310** may be configured to support the weight of the container, as well as the weight of any components and/or water contained therein. For example, in certain embodiments, the container **310** is configured to support the weight of up to 50,000 pounds, or more, a large portion of which may be attributable to a volume of water contained within the swimming chamber of the container.

The container **310** may include one or more exterior ladder rungs **339**, which may provide convenience and/or safety functionality for users getting in and/or out of the pool chamber. The container **310** may further comprise water jet intake ports **337** for feeding water for circulation purposes into the interior of the swimming chamber. In certain embodiments, the intake ports **337**, together with one or more drain ports **344**, create a cleaning cycle for circulating and/or cleaning water in the swimming chamber. Furthermore, the swimming container **310** may comprise a skimmer port **342** at, for example, a wall of the swimming chamber, which may be configured to pull water from the swimming chamber for cleaning, a heating, circulation or other purposes. The various circulation ports (**337**, **344**, **342**) may each be configured to expel and/or suck water into or from the swimming chamber of the swimming containing **310**. Although the various ports are illustrated in certain portions or regions of the swimming container **310**, it should be understood that such ports may have any desirable or practical positioning and/or configuration.

The support beam structure **335** may be adjacent to or integrated with a window support structure **331**. The window support structure **331** may provide a frame around the window **360**. In certain embodiments, the window support structure **331** includes tab structures (not shown) around the window frame, which may be shaped and configured to nestingly receive an acrylic or other type of windowpane and provide support thereto. In certain embodiments, the tab structures of the window support structure **331** may be approximately 1 to 2 inches in thickness. The tabs structures may provide a stub frame structure that the windowpane may be nested in, wherein the water pressure inside the swimming chamber may provide outward force pressing the windowpane against the window support structure **331**, thereby at least partially securing the windowpane in place. The windowpane may be further secured to the swimming container **310** with an adhesive or seal or other type of securing substance or structure.

FIG. **4** is a perspective view showing back and side portions of a swimming container **410**, which may correspond to the swimming container **310** shown in FIG. **3** and described above. Swimming container **410** includes an internal swimming chamber configured to hold a volume of water, as described above. Within the swimming chamber, the container **410** may comprise one or more internal ladder rungs **449**, which may be provided for convenience and/or safety purposes for allowing users to support themselves within the swimming chamber, as well as climb out of the swimming chamber.

On the back side of the container **410**, a pool supply housing compartment **416** may be accessible through one or more door members **417**, **419**. As illustrated, the door **417** is in a substantially closed position, whereas the door **419** is in an open position. The pool component housing compartment **416** may be configured with one or more ventilation apertures or holes **418**, **442**, which may provide ventilation for one or more components, such as heating and/or cooling components and the like. The various ventilation apertures may be positioned on any outward facing wall or structure of the housing compartment **416**, such as in one or more of the door structures or side wall structures, such as the sidewall portion **411** of the side of the swimming container **410**. In certain embodiments, the sidewall portion **411** of the housing compartment **416** may be fitted with an electrical box or electrical plug or access feature. For example, as certain components housed within the housing **416** may consume electrical power, such electrical power may be sourced from an external outlet or power source, and may be provided to the components in the housing through an electrical access accessible through the sidewall **411**. In certain embodiments, an electrical box is disposed within the housing **416** and electrically coupled to a cable or electrical port secured to the sidewall **411**, or running therethrough. In certain embodiments, the electrical box may be configured to be coupled to a 220 V electrical outlet. In certain embodiments, the electrical access (not shown) of the sidewall **411** simply consists of an aperture through which an electrical cable may run.

An upper frame **471** of the swimming container **410** may include one or more ridge or recess features, or receptacles, configured to receive and/or secure components thereto (e.g., in a configuration allowing for attachment and removal of the component(s)), wherein certain add-on components may be secured to the upper frame **471** to provide additional features not shown in the figure. For example, such add-on features may include seating structures, platform structures, or the like. In certain embodiments, a shallow end may be provided for the swimming container **410** by securing a platform structure to the upper frame **471** at one or more sides or regions thereof. Such components may have hook or latch features configured to secure to corresponding recess or mounting structures of the upper frame **471** and thereby be mounted or secured thereto.

The swimming container **410** may further include one or more wheels **432** and/or one or more feet or other support structures, as described above. Furthermore, the swimming container **410** may comprise a track system for being fitted to a roll-off truck or the like, or one or more other components described in connection with one or more other components or embodiments disclosed herein.

FIG. **5** illustrates a front view of a swimming container **510**. The illustrated embodiment FIG. **5** may include one or more features disclosed in connection with FIG. **3** and/or FIG. **4**. For example, the swimming container **510** may include one or more feet structures **532**, or wheel structures, which may provide supports for the swimming container.

The container **510** may further comprise a track system **570** including one or more wheel structures **572**, as well as a guide region **574**. The container **510** may further comprise a hook or locking member **576** for securing the container to a truck or other structure.

The container may include one or more push jet apertures **537**A, **537**B, which may be positioned a distance $d_0$ apart, and may be positioned a distance $d_1$ vertically from a bottom of an internal swimming chamber of the container **510**. The push jet features may be used for filtration purposes or the like, as described above. The front portion of the container **510** may further comprise one or more ladder rungs **539** for providing functionality for entry into the swimming chamber of the container **510**, or support for the user to secure his or herself to the exterior of the container **510**.

FIG. **6** is a back view of a swimming container **610**. The swimming container **610** includes one or more doors **619**, **617**, which may be configured to provide access to a pool component housing compartment or chamber, such as that described above. One or more of the door members may comprise a locking or securing feature **609**, such as a locking lever system, configured to lock or secure the respective door in a closed position. One or more of the door members may further comprise a vent access or aperture **618**, which may have any desirable or practical dimensions. For example, a door vent may have a width $w_1$, which may be, for example, approximately 24 inches, and a height $h_1$, which may be, for example, approximately 12 inches. The one or more door vents may provide venting for electrical and/or mechanical components housed within the component housing chamber position behind the door members **619**, **617**.

The swimming container **610** may further comprise one or more wheel or other support structures **632** at a back end of the container. Furthermore, the container **610** may comprise a track system on an underside of the container. In certain embodiments, the track system may have a width $w_2$, such as, for example, a width of approximately 24 inches.

FIG. **7** provides a cross-sectional view of the swimming container **710**, which may be similar in certain respects to the container **610** shown in FIG. **6** and described above. The view of FIG. **7** may represent a view of the container **610** of FIG. **6** providing a view of the component housing chamber **716** positioned behind the door members **619**, **617** of the container **610**.

The container **710** includes a skimmer component **722**, which may comprise a pump and/or drain component positioned to receive water through a duct or aperture leading through a retaining wall of the swimming container **710** and into a swimming chamber positioned opposite the retaining wall, and possibly holding a volume of water therein. The container **710** further includes one or more additional pump and/or filtration components **726**, which may be connected to certain plumbing structures providing plumbing routing for pool components.

In certain embodiments, the swimming chamber and/or other portions of the swimming container **710** may be a substantially radiused container in one or more regions. For example, while the interior of the pool component housing chamber may be substantially cubicle in shape, a bottom portion of the swimming chamber may include a rounded corner **719**, wherein a cavity **711** between the rounded/radiused corner of the pool chamber and he write-angle corner of the container **710** may be utilized for the purpose of providing feeding/channeling plumbing components at least partially therein. For example, as shown, one or more pipes **723** may be configured to run through the cavity **711** along a longitudinal direction of the container **710** to provide water circulation to other more remote portions of the container **710**. In certain embodiments, plumbing pipes are configured to run through the cavity **711** to one or more drain components **728** that may be disposed, for example, on an underside of the swimming chamber (not shown) of the container **710**.

FIG. **8**A shows a side view of a swimming container **810**, which may be similar in certain respects to the swimming container **710** shown in FIG. **7** and described above. The swimming container **810** includes a window **860**, which may have a width $w_3$ of approximately 90 inches and a height $h_2$ of approximately 18 inches, for example. The window **860** may provide a view into a swimming chamber of the swimming container **810**.

The swimming container **810** may further comprise one or more internal ladder rungs **849**, as well as external ladder rungs **839**, which may provide functional and/or safety features for the swimming container. The diagram of FIG. **8**a provides a view of a radiused bottom corner **819** of the swimming chamber of the container **810**, which may run along a longitudinal axis of the container **810** for at least a portion of the length of the container. As described in reference to FIG. **7**, in certain embodiments, pool plumbing components may be run outside of the radiused corner of the swimming chamber to provide access to one or more drain features **828** by pool components housed in a housing chamber **816** of the swimming container **810**, such as a pump **826** and/or skimmer **822**, as well as other components possibly. Although the drain components **828** are illustrated as being positioned in proximity to the pump **826** or other components housed in the housing **816**, it should be understood that drain features **828** may be positioned at any point along the width or length of the underside of the swimming container **810**.

FIG. **8**B provides a close-up view of certain components illustrated in the diagram of FIG. **8**A. For example, the figure shows the pump **826** connected to plumbing components **823** that run between the pump **826** and one or more drain components **828**. In certain embodiments, a swimming container has a plurality of drain components disposed on an underside of the swimming chamber of the container a distance $d_3$ apart, such as a distance of approximately 22 feet. In certain embodiments, the distance $d_3$ may be approximately 36 inches, or other distance. The distance between drain components may be selected to provide compliance with relevant regulations or specifications. The plumbing components **823**, which may comprise one or more pipes or tubes for channeling water between the pump **826** and the one or more drains **828** may run on an underside of the container **810**, or may be disposed at least partially within a cavity between a radiused corner of the swimming chamber of the swimming container and an outer right-angle-corner, wherein a cavity comprises the space therebetween.

The plumbing **823** may run along the radiused corner **819** to one or more jets (not shown), which may be, for example, intake jets. In certain embodiments, the intake jets are connected to plumbing lines which connect between the intake jets and one or more of the drains **828** and the pump **826**.

FIG. **9**A provides an overhead view of a container **910** including a swimming chamber. Similarly to the diagram of FIG. **8**A, the container **910** is illustrated as having a radiused bottom corner **919** of the swimming chamber **912** on side corners of the container. The overhead view of FIG. **9**A shows a possible path of plumbing for plumbing lines **923**

from the component housing **916** to drains **944** connected to an underside of the swimming chamber **912**. Similarly to the plumbing of FIGS. **8**A and **8**B, the plumbing **923** of FIG. **9**A may run along an underside of the container **910**, or may fit at least partially within a cavity disposed between the radiused corner **919** and an exterior right-angle-corner of the container **910** on a bottom portion of the container. Although the container **910** is illustrated as having drains **944** in a particular position proximal to the pump **926** and component housing **916**, it should be understood that the drains **944** may be positioned in any suitable or desirable position along the length or width of the container **910**. The illustration of FIG. **9**A further shows a skimmer component **922** which may receive water from the swimming chamber for filtration heating or other treatment of said water during operation of the pool container **910**.

FIG. **9**B provides yet another overhead view of a swimming container having drain apertures **945**, which may be disposed in a substantially central region of the swimming chamber **913**. For example, the drains **945** may be disposed a distance $d_4$ laterally from a side portion of the container (e.g., a distance of approximately 2 feet) and a second distance $d_5$ (e.g., a distance of approximately 5 feet) from the opposite side of the container along a width of the container. The drains **945** may further be disposed a longitudinal distance $d_6$ from a front end of the container (e.g., a distance of approximately 9 feet). The illustrated container of FIG. **9**B further includes a platform **970**, which may be associated with a roof of a pool component housing chamber in certain embodiments.

The drains **945** may be spaced apart according to federal regulations for pool trains, or other specifications. The drains **945** of FIG. **9**B show an alternative positioning for drains relative to the drains **944** shown in FIG. **9**A.

FIG. **10** illustrates a side view of a swimming container **1010** illustrating various dimensions of a swimming container according to certain embodiments disclosed herein. The container **1010** includes a swimming chamber **1012** and a pool components housing chamber **1016**. The illustration of FIG. **10** further shows an example water line **1001**, which may represent a height to which a volume of water may be advantageously filled in the swimming chamber **1012** of the container **1010**. The diagram of FIG. **10** illustrates various alternative dimensional configurations of a container according to certain embodiments. For example, the swimming chamber **1012** the container **1010** may include a shallow end portion extending a longitudinal distance $d_{10}$ (e.g., a distance of approximately 4 feet), which may correspond to a longitudinal depth of the pool component housing chamber **1016**. The vertical depth of the shallow end may be represented by one or more of the dimensions $d_8$, $d_7$, and may be, for example, approximately 2 feet in depth. In certain embodiments, the portion **1011** may comprise a hot tub portion of the container **1010**, wherein the hot tub portion **1011** is partitioned physically from the swimming chamber **1012**, such that water in the hot tub portion **1011** is at least partially prevented from flowing freely into the pool chamber **1012**.

The collective vertical depth of the container **1010** is represented by the dimension $d_{11}$, and may have a value of approximately 6 feet in certain embodiments. The height $d_9$ of the pool component housing chamber **1016** and the depth of the shallow end portion of the pool chamber **1012** may combine to approximately the dimension $d_{11}$, which is the height of the container **1010**, roughly. The container **1010** may have a total longitudinal length of approximately 22 feet, represented by the illustrated dimension $d_{12}$. The shallow end portion and/or pool component housing portion of the container **1010** may have a longitudinal dimension represented by the illustrated dimension $d_{10}$, which may be approximately 4 feet.

The container **1010** may further be associated with a pool cover component **1085** which may provide safety and/or protection from debris or serve other purposes, such as pool heating or the like. In certain embodiments, the pool container **1010** includes a deck portion (not shown), wherein the pool cover may be housed or contained at least partially within a portion of the deck, such as during non-use of the pool cover. Additionally or alternatively, one or more mechanical and/or electrical components associated with the cover **1085** may be housed within the deck portion or other portion of the container **1010**, and may provide for automatic and/or manual winding up of the pool cover, or other pool-cover-related functionality.

FIG. **11** illustrates a top-down view of a pool container **1110** according to one or more embodiments. The pool chamber **1110** includes a longitudinal dimension $d_{12}$, which may be approximately 4 feet. That pool container **1110** further illustrates a primary swimming chamber **1112**, as well as a plurality of secondary regions or chambers **1111**, **1117**. In certain embodiments, one of the plurality of secondary chambers or regions **1111**, **1117** comprises a shallow end portion, wherein said portion holds water that is allowed to substantially freely flow between the main portion **112** and the secondary shallow end portion. Another of the secondary chambers or regions **1111**, **1117** may comprise a hot tub portion, which may be at least partially partitioned and/or segregated from the remaining regions or chambers of the container **1110**.

Collectively, the secondary chambers or portions **1111**, **1117** may have a combined with of approximately 8 feet, represented by the dimension $d_{15}$ shown. In certain embodiments, each of the secondary chambers or regions has a uniform width $d_{14}$, which may represent half of the dimension $d_{15}$ shown. Alternatively, the dimension $d_{14}$, corresponding to the width of one of the secondary chambers or regions of the container **1110** may have a value that is greater than a corresponding with dimension of the other of the chambers or portions **1111**, **1117**.

Furthermore, one or more of the secondary chambers or portions **1111**, **1117** may comprise a longitudinal depth represented by the illustrated dimension $d_{10}$, which may have a value of approximately 4 feet. In certain embodiments, the main pool chamber **1112** may have a longitudinal dimension of approximately 18 feet, represented by the dimension $d_{13}$ illustrated, which, combined with the dimension $d_{10}$, may add up to the total longitudinal dimension $d_{12}$ of the container **1110**.

FIG. **12** illustrates a perspective view of a swimming container **1200** having a main swimming chamber **1212**, as well as a secondary swimming chamber **1213**, which may be a hot tub feature or the like. The swimming container **1200** further includes an exterior platform **1272**, which may have associated with therewith one or more stairs **1273**. The platform **1272** may be substantially non-portable platform structure, which may be integrated with the swimming container **1200**, or otherwise associated therewith. The deck **1272** may have any desirable height, and may further include a ladder that leads from the deck structure **1272** to one or more swimming chambers of the container **1200**.

FIG. **13** illustrates a perspective view of the swimming container **1300** including a singular main swimming chamber **1310** that extends substantially the entire longitudinal length of the pool container **1300**. In certain embodiments,

the swimming container **1300** may be used as a lap pool. The pool components associated with the swimming container **1300** may be maintained in a bottom chamber (not shown) positioned or disposed at least partially beneath the primary swimming chamber **1310**, or may be maintained in an exterior housing structure (not shown) coupled or associated with the pool container **1300** in some manner.

FIG. **14** illustrates a pool container **1400** having a pop-up deck feature **1471**, which may be a substantially retractable deck having one or more support structures or posts **1477**. The swimming container **1500** may be configurable such that the deck may be extended upward from a closed position wherein the deck **1471** lies substantially flush with a side portion of the swimming container **1400** when in the closed state. When extended outward and upward, the support members **1477** may be used to provide support for the deck in a horizontal position as shown. One or more windows **1460** may be revealed under the deck portion **1471** when the deck portion **1471** is opened from a closed position.

The opening of the deck portion **1471** may be facilitated by a crank or other feature **1478**, which may provide for manual and/or at least partially automatic extension of the deck portion **1471**. The retractable deck **1471** may be supported by pulling the beams **1477** down and allowing the deck to rest upon the beams which are supported by the ground or other surface. The retractable characteristics of the deck **1471** may allow for greater mobility of the swimming container **1400**, wherein the swimming container **1400** may be transported or repositioned while the deck **1471** is in a substantially closed state.

One or more barrier or rail members **1479** may be disposed to provide safety and/or aesthetic features for the deck **1471**. For example, a rail or fence structure may be positioned substantially around the perimeter/periphery of the deck **1471**. The banister feature may be integrated with the deck or mountable thereto. For example, the banister feature may comprise one or more holes and/or pull features that connect into the deck to secure thereto. The banister feature may have any desirable height, such as 4 feet, 6 feet, or other height.

FIG. **15** illustrates a swimming container **1500** including an additional slide features **1591** which may be integrated with the swimming container **1500** or attachable or disposable thereon. The swimming container **1500** may be further associated with one or more step features **1508** which may be integrated with the swimming container, or otherwise associatable therewith.

In certain embodiments, the swimming container **1500** may comprise an exterior paneling **1550**, which may be, for example, print-on wood or other material. The exterior paneling **1550** may be preprinted with certain designs and/or features to provide aesthetic features and/or customizability of the swimming container **1500**. The paneling may be configured to be bolted or otherwise connected to an exterior of the swimming container **1500**, such as by a French cleat, snap connector, or other removable connection mechanism. In certain embodiments, different paneling options may be interchangeable, such that the appearance of the swimming container **1500** may at least partially be modifiable by a user.

FIG. **16** illustrates swimming container **1600** having an enhanced exterior feature **1755**, which may be a structure configured to surround at least partially an interior swimming container **1610** and provide aesthetic and/or structural features for the container **1600**.

The swimming container **1600** may further include a platform structure **1679** having one or more additional features associated therewith, such as a diving board **1677** and/or ladder **1659**. In certain embodiments, the platform structure **1679** is configured to house one or more pool components, in a similar manner as described above in connection with other embodiments. The exterior structure **1655** may take any form or shape as desirable, such as the illustrated pirate ship structure or other form.

FIG. **17** illustrates a perspective view of a swimming container **1700** having a themed design, for example, a fire truck design or the like. A design of a pool container **1700** may include one or more additional features, such as a water pump may be used to circulate water from the pool for entertainment or other purposes. The water pump **1708** may include a hose, and may be positioned exterior to the swimming container **1700**, and/or may be disposed on a top deck portion or other portion of the swimming container **1700**. The water pump **1708** may be configured to receive water from in-ground plumbing, or the pool itself.

Other Embodiments

Unless the context clearly requires otherwise, throughout the description and the claims, the words "comprise," "comprising," and the like are to be construed in an inclusive sense, as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to." The word "coupled", as generally used herein, refers to two or more elements that may be either directly connected, or connected by way of one or more intermediate elements. Additionally, the words "herein," "above," "below," and words of similar import, when used in this application, shall refer to this application as a whole and not to any particular portions of this application. Where the context permits, words in the above Description using the singular or plural number may also include the plural or singular number respectively. The word "or" in reference to a list of two or more items, that word covers all of the following interpretations of the word: any of the items in the list, all of the items in the list, and any combination of the items in the list.

The above detailed description of embodiments of the invention is not intended to be exhaustive or to limit the invention to the precise form disclosed above. While specific embodiments of, and examples for, the invention are described above for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will recognize. For example, while processes or blocks are presented in a given order, alternative embodiments may perform routines having steps, or employ systems having blocks, in a different order, and some processes or blocks may be deleted, moved, added, subdivided, combined, and/or modified. Each of these processes or blocks may be implemented in a variety of different ways. Also, while processes or blocks are at times shown as being performed in series, these processes or blocks may instead be performed in parallel, or may be performed at different times.

Similarly, it should be appreciated that in the above description of embodiments, various features are sometimes grouped together in a single embodiment, figure, or description thereof for the purpose of streamlining the disclosure and aiding in the understanding of one or more of the various inventive aspects. This method of disclosure, however, is not to be interpreted as reflecting an intention that any claim require more features than are expressly recited in that claim. Rather, inventive aspects lie in a combination of fewer than all features of any single foregoing disclosed embodiment.

The teachings of the invention provided herein can be applied to other systems and assemblies, not necessarily the

systems/assemblies described above. The elements and acts of the various embodiments described above can be combined to provide further embodiments.

While some embodiments of the inventions have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the disclosure. Indeed, the novel methods and systems described herein may be embodied in a variety of other forms; furthermore, various omissions, substitutions and changes in the form of the methods and systems described herein may be made without departing from the spirit of the disclosure. The accompanying claims and their equivalents are intended to cover such forms or modifications as would fall within the scope and spirit of the disclosure.

What is claimed is:

**1**. A swimming container comprising:

a first compartment at a first longitudinal end of the swimming container having a roof structure forming at least part of a deck structure, the first compartment having first and second doors providing access to the first compartment;

a water pump housed within the first compartment;

a water filter device housed within the first compartment;

first and second sidewalls extending along a length of the swimming container;

a wall partition connected between the first and second sidewalls at a position along the length of the swimming container, the wall partition providing water-tight separation between the first compartment and a second compartment configured to hold a volume of water;

a bottom portion comprising:

one or more drain apertures;

a guide track that runs along a longitudinal center of the bottom portion;

first and second wheels disposed on opposite sides of the guide track at a second longitudinal end of the swimming container; and

a hook structure disposed at the second longitudinal end of the swimming container at least partially above the guide track; and

a support beam extending vertically along each of the first and second sidewalls and below the bottom portion to provide support for the swimming container;

wherein the support beam is integrated with a window frame of the first sidewall.

**2**. The swimming container of claim **1**, wherein at least one of the first and second doors comprises a vent aperture.

**3**. The swimming container of claim **1**, further comprising a pipe running beneath the bottom portion and connecting the one or more drain apertures to the water pump in the first compartment.

**4**. The swimming container of claim **1**, wherein the first sidewall includes a window comprising a rigid, transparent panel structure.

**5**. The swimming container of claim **1**, wherein the deck structure provides an ingress/egress platform for the second compartment.

**6**. The swimming container of claim **1**, further comprising one or more removable exterior panels secured to one or more of the first and second sidewalls.

**7**. The swimming container of claim **1**, wherein the bottom portion further comprises support members at each of four corners of the swimming container.

**8**. The swimming container of claim **7**, wherein the support members comprise two wheel supports and two foot supports.

**9**. A swimming container comprising:

a first compartment at a first longitudinal end of the swimming container having a roof structure forming at least part of a deck structure, the first compartment having first and second doors providing access to the first compartment, the first compartment being dimensioned to house:

a water pump; and

a water filter device;

first and second sidewalls extending along a length of the swimming container;

a wall partition connected between the first and second sidewalls at a position along the length of the swimming container, the wall partition providing water-tight separation between the first compartment and a second compartment configured to hold a volume of water;

a bottom portion comprising:

one or more drain apertures;

a guide track that runs along a longitudinal center of the bottom portion;

first and second wheels disposed on opposite sides of the guide track at a second longitudinal end of the swimming container; and

a hook structure disposed at the second longitudinal end of the swimming container at least partially above the guide track; and

a rectangular upper frame at least partially lining an upper perimeter of the second compartment, the upper frame including a receptacle configured to removably receive a connection portion of a recessed platform structure.

**10**. The swimming container of claim **9**, wherein the recessed platform structure forms a shallow-end standing surface for the second compartment when secured to the upper frame.

**11**. The swimming container of claim **9**, wherein the recessed platform structure forms a seat disposed within the second compartment when secured to the upper frame.

**12**. The swimming container of claim **1**, further comprising a radiused floor surface forming a longitudinal cavity between the radiused floor surface and the bottom portion.

**13**. The swimming container of claim **12**, comprising a pipe disposed within the longitudinal cavity that is connected to the water filter device.

**14**. A method of manufacturing a swimming container, the method comprising:

providing an open-top container having a rectangular prism shape, the open-top container including:

a front end wall;

first and second sidewalls;

a back end wall formed of first and second doors; and

a bottom structure comprising a guide track that runs along a longitudinal center of the bottom structure, first and second wheels secured on opposite sides of the guide track, and a hook structure disposed proximate the front end wall at least partially above the guide track, the front end wall, the first and second sidewalls, the back end wall, and the bottom structure forming a trench;

dividing the trench into a first compartment and a second compartment at least in part by attaching a wall partition to the first and second sidewalls in a substantially water-tight attachment;

forming a deck structure at least in part by attaching a roof structure to the first and second sidewalls, the back end wall, and the wall partition at least partially above the first compartment;

disposing a water pump and a water filter within the first compartment;

forming an aperture in the second compartment; and

connecting the water pump to the aperture.

**15**. The method of claim **14**, further comprising cutting a vent aperture in the first door.

**16**. The method of claim **14**, further comprising forming a receptacle in an upper frame that lines at least part of the second compartment, the receptacle being configured to removably receive a connection portion of a recessed platform structure.

**17**. The method of claim **16**, wherein the recessed platform structure forms a shallow-end standing surface for the second compartment when secured to the upper frame.

**18**. The method of claim **16**, wherein the recessed platform structure forms a seat disposed within the second compartment when secured to the upper frame.

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